SCENARIOS FOR FUTURE GROWTH
Demographic Interpretations

A Discussion Paper

The Metropolitan Toronto Planning Department

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SUMMARY

An urban area is a constantly evolving entity responding to the push and pull of changing economic and demographic pressures and opportunities. Although Metropolitan Toronto is largely built, there will be significant opportunities to mould the urban fabric in response to those pressures. This report describes alternative land use scenarios for Metropolitan Toronto within the context of growth in the Greater Toronto Area (GTA) which, on the basis of prior studies, is estimated to grow to 6 million people and 3.4 million jobs sometime beyond the year 2011. These scenarios provide: context for the Metropolitan Strategic Plan; an evaluation of proposed policies in the new Metropolitan Official Plan; an estimation of the impact of proposed developments; and an indication of the range of uncertainty about future growth in Metro.

The alternative scenarios for Metro are intended to depict, in terms of population, housing and employment growth, what Metro would look like if:

- current development applications and development trends were achieved; or
- new development was concentrated in the Metropolitan Centres and selected corridors along existing and proposed rapid transit lines; or
- new development was concentrated in a large number of centres, including centres currently designated and proposed; or
- new development was spread along arterial roads throughout Metro in a "Main Street" type of development.

In addition to geographic variations in the allocation of growth, different levels of long term growth within Metro were examined; for population levels ranging from 2.5 to 3.2 million and for employment levels ranging from 1.7 to 1.9 million. The scenarios also incorporate demographic trends, the most important being the continuing decline in the number of persons per household and the growth in the older age groups within Metro.

Higher levels of growth within Metro will reduce the spread of the urban area of the GTA. However, if Metro is to achieve the higher population levels, it would have to compete more successfully in the regional housing market by obtaining a higher share of new housing completions than it has in the past. Metro must also confront an increasing flow of commuters from the surrounding regions to jobs within Metro as the labour force resident within Metro decreases due to the aging of Metro's population.

The range of population and employment would vary within Metro depending upon both the total growth and the distribution of that growth. Table S.1 shows the range of population and employment which would be expected to the year 2011 based on the scenarios. In the Trend Scenario, #1A, which is based on the construction of most development applications, Metro would grow to almost 2.5 million people and 1.72 million jobs by the year 2011 demonstrating that Metro could accommodate the recommended forecast in the Planning Department report, "Projections and Their Policy Implications". All other scenarios, excepting the Development Trend Extended, represent target levels of population and employment. To achieve a long term population of 3.2 million, it is anticipated that the average number of persons per household within Metro will be higher than at lower population levels because of the requirement that Metro would have to attract more family households.

Table S.1

	Range of Municipal Population and Employment ('000) 1990 - 2011				
Municipality	Population by 2011			Employment by 2011	
	Trend #1A	Metro 2.7 million	Metro 3 million	Trend #1A	Metro 1.8 million
Toronto	679	759- 833	938- 981	745	751- 801
York	160	157- 172	174- 182	44	46- 67
East York	105	105- 116	109- 117	37	36- 44
Etobicoke	355	357- 377	386- 399	226	229- 251
North York	631	647- 685	735- 742	404	416- 440
Scarborough	539	573- 580	629- 635	259	273- 284

The average age of Metro's population is expected to increase, albeit at a slower rate if higher population levels are to be achieved within Metro. This "aging" of Metro's population is expected to have impacts on the municipal services ranging from day care and schools through to homes for the aged and home care programs. This aging of the population will result in declines in the labour force resident in Metro except in areas where significant new housing development is expected. The best balance between resident labour force and jobs in Metro is produced by scenarios which spread development throughout Metro and constrain employment and promote population growth in the Central Area.

Opportunities for job growth appear to be greatest in the office sector, more moderate in the retail and service sectors and least in the industrial (manufacturing and wholesaling) sector. This type of employment growth will provide the greatest opportunities for growth in the Central Area, Metropolitan Centres and office parks. It could also increase the pressure for changes in the types of uses permitted in traditional industrial areas.

The scenarios presented are not a definitive statement of what Metro will look like in the future. Much depends on current planning work, such as the new Metropolitan Official Plan and the long range rapid transit study, and the extent to which that work is implemented through Metropolitan and municipal policies. In addition there are trends and uncertainties which Metro must confront if it is to achieve its targets. These include the effectiveness with which Metro can provide additional family type housing relative to the regional market and the future vigour of the regional economy.

1. *INTRODUCTION*

1.1 *Purpose*

This report describes alternative development scenarios for Metropolitan Toronto, together with the methodology used to create them and some of the broader implications of their achievement. The scenarios:

- provide some *context* for the complex decisions that must be addressed when implementing the **Strategic Plan**[1] and developing policies for the new Metro Official Plan;
- provide a basis for *evaluating the policy initiatives* being considered for the new Official Plan and major *infrastructure* required to support those policy initiatives;
- *evaluate potential development*, either proposed or under consideration; and
- *document the extent of uncertainty* about future growth that must be dealt with when planning for future facilities and services in Metro.

This report does not evaluate, rate or recommend any of the scenarios. The purpose of this report is to interpret the range of possible growth alternatives within the context of the Strategic Plan and to provide information about the magnitude and distribution of future population and employment activities within Metro and the Greater Toronto Area (GTA). Those distributions can then be utilized to evaluate alternative strategic initiatives such as improvements to the transportation infrastructure. That evaluation will provide a measure of the compatibility of strategic investments with the potential policy directions.

1.2 *Context*

There has been considerable work done on forecasting and setting growth targets for Metro. Within the context of the GTA, the report **Projections and their Policy Implications**[2] outlines past trends, reviews alternative levels of growth and recommends a target population for Metro of 2.5 million by the year 2011. The Greater Toronto Coordinating Committee forecasts a GTA population ranging between 5.53 and 6.51 million by the years 2021[3]. This work was extended by consultants in the **Greater Toronto Area Urban Structure Concepts Study**[4] which suggests that, by the year 2021, Metro's population could range between 2.4 million and 3.8 million with a middle concept of 2.8 million and Metro's employment could range between 1.7 and

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[1] Metropolitan Toronto Government, **Strategic Plan**, May 1991

[2] **Projections and Their Policy Implications**, Metropolitan Toronto Planning Department, April 1989

[3] Clayton Research, **Projections of Population and Households in the Greater Toronto Area**, October 1989.

[4] IBI Group, **Greater Toronto Area Urban Structure Concepts Study**, June 1990

2.2 million. The Metro **Strategic Plan** refers to the GTA forecasts of 6 million and sets a population target for Metro of between 2.5 and 2.8 million by the year 2011. These studies and reports deal with the gross population and employment growth for Metro and the surrounding area. None adequately deal with the possible distribution of future growth within Metro's boundaries.

Specific policies, such as the Main Street program[5], the creation of additional centres and encouraging the balancing of where people live and work, are being considered for inclusion in the new Metro Official Plan. These policies are aimed at accommodating the growth targeted in the Strategic Plan. At the same time there are a number of studies under way investigating strategic transit initiatives. A mechanism is required to test the fit between the proposed policies and the strategic initiatives so that investments in infrastructure help achieve the development envisaged in the policies and the areas of development support the infrastructures and its use.

1.3 Approach

This report interprets potential policy directions into a set of scenarios which are described in terms of population, housing and employment distributions. Two scenarios are created on the basis of development activity (the *development trend scenarios*) while the remaining scenarios are built on policy initiatives (the *policy scenarios*). The policy scenarios reflect the population growth targets in the Strategic Plan and are developed in a top down approach that distributes the population targets to specific growth areas based on interpretations of possible policy initiatives. The two development scenarios are bottom up estimates of the amount of population and employment that could be accommodated based on an evaluation of development which is proposed or under consideration and deemed possible by planners.

1.4 Interpretation and Limitations of the Data

The information in this report was developed for a specific purpose and should be interpreted with caution. The following are some of the factors that should be considered when utilizing or interpreting the information.

- *Demographic factors could change* - Estimates of growth contain assumptions about demographic characteristics that may alter over time. Unexpected changes in immigration, migration and birth rates could affect the overall growth in the GTA.
- *The economy could change* - Estimates of the future contain assumptions about the social and economic conditions in the area relative to the Country, the continent and the world. Unexpected changes in economic conditions could affect such parameters as immigration and migration as well as the relative performance of the GTA economy.

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[5] A program intended to increase housing in low rise developments (2 to 5 stories) along appropriate arterial and major roads (Main Streets) throughout Metro.

- *Housing occupancy rates could change* - The number of persons per household (PPH) is of critical importance to the achievement of Metro's population target. Unanticipated declines in the PPH could inhibit reaching the population target despite substantial increments to Metro's housing stock.

- *These are targets, not projections* - The scenarios are based on the growth targets of the Strategic Plan not on projections of past trends. The targets for growth are quite different than what past trends would suggest, and will require major initiatives on the part of Metro, the area municipalities, the Province and the private sector to achieve. The ability to mount and coordinate those initiatives and the efficacy of those initiatives will impact the amount of growth that occurs in Metro.

- *The preferred development pattern may be a blending of scenarios* - This report presents the growth potential for different policy scenarios. For the purposes of analyses it was desirable to differentiate clearly between the alternatives; however it is unlikely that future growth will follow any one of these particular scenarios. Additional work will be required to detail the preferred scenario when it is selected.

- *Reliability of the data varies with time and geographic detail* - The scenarios show detailed growth within the municipalities for analysis. However, the smaller a geographic area, the more difficult it may be to estimate growth. Similarly the further into time that forecasts extended the greater the degree of uncertainty. In particular, the long term forecasts are included to provide background information and should be used only with extreme caution.

1.5 Organization of the Report

This report is organized in the following manner. Chapter two provides context by discussing past and current demographic and economic trends for the GTA and Metro. Chapter three describes how each of the scenarios was developed. Chapter four describes the scenarios within the context of growth in the GTA. Chapter five discusses the implications of each of the scenarios within Metro. Chapter six draws together the conclusions from the scenarios and indicates the nature of future directions arising from this exercise.

2. *PAST AND CURRENT TRENDS*

This chapter presents a discussion of past and current demographic trends. Understanding such trends is essential to the creation of future scenarios.

2.1 *Greater Toronto Area*

The Greater Toronto Area (GTA), shown in Figure 2.1, had approximately 4.2 million people and 2.35 million jobs in 1991. Past GTA population and employment growth rates have been reasonably steady except for a slight slow down in the late seventies and early eighties when the economic boom in western Canada attracted capital and population from Ontario. Both labour force and employment have grown at a faster rate than population because of the rapid growth of the working age population and increase in female participation. In 1986, there were approximately 60,000 more jobs than resident, employed labour force in the GTA. By 1991, it is estimated to be almost 80,000 (see Appendix Four).

THE GREATER TORONTO AREA

Figure 2.1

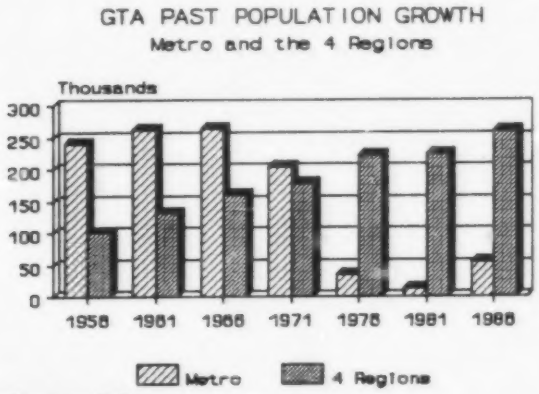


Figure 2.2

Metro experienced substantial population growth in the fifties and sixties, as indicated in Figure 2.2, but only small increases since 1971. Meanwhile the surrounding regions have experienced a steady growth rate. As a consequence, Metro's share of the GTA population has declined from 81% in 1951 to 58.7% in 1986.

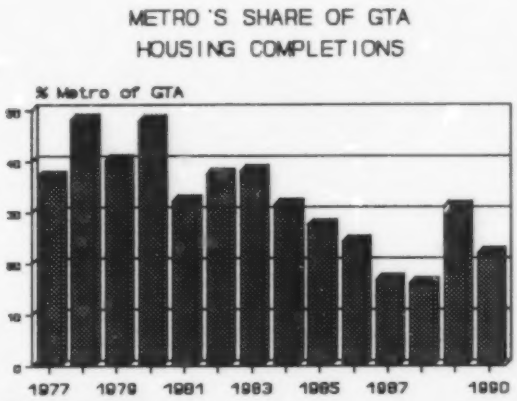


Figure 2.3

As indicated in Figure 2.3, Metro's share of housing completions in the GTA has declined. Although there is a strong preference in the population of the GTA for single detached housing, Metro's ability to meet that portion of the housing market has rapidly declined because of the diminishing land base.

Metro's share of jobs in the GTA has declined from 71% in 1971 to 65% in 1986. This signifies an increase in the growth rate of jobs in the Regions.

There are major population nodes in the Regions, as shown in figure 2.4[6], particularly along the lakeshore east and west of Metro, along Yonge Street north of Metro and in the Central Brampton area. The density and concentration of population is much greater within Metro, particularly in Toronto, than the urban areas of the Regions, although there are some high density areas in Mississauga and Brampton.

Employment within the GTA, shown in Figure 2.5, is much more concentrated in Metro than population particularly in the Central Area of Toronto. The Regions have significant employment nodes focused around the airport, along the lakeshore both west and east of Metro, along a corridor from Metro to the Mississauga City Centre and north of Steeles, particularly at the CNR yard in Vaughan and at the intersection with Highway 404.

2.2 METROPOLITAN TORONTO

2.2.1 Population and Housing

According to the 1986 Census Metro had a population of 2,192,721 and an occupied household count of 827,492. The average number of persons per household (PPH) was calculated to be 2.65. The Assessment Branch of the Ontario Ministry of Revenue estimated Metro's population at 2,133,459 in 1988 and 2,148,989 (preliminary) in 1991[7].

Figure 2.6

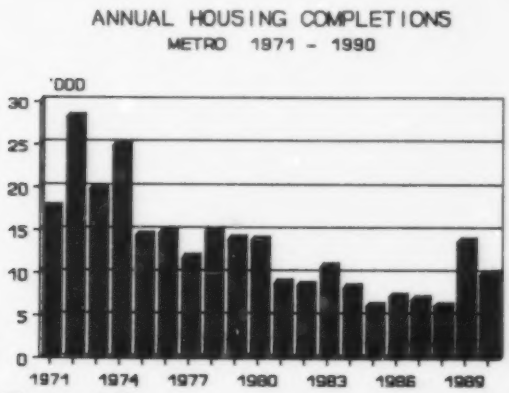


Figure 2.7

Since 1971 less than 50,000 people have been added to Metro's population in any five year census period as illustrated in Figure 2.2. During the same period, Metro experienced a decline in housing completions as indicated in Figure 2.7 although there has been an increase in the last few years. Housing completions since 1971 have had little impact on population growth in Metro because of demolitions and a continuing decline in the PPH.

---

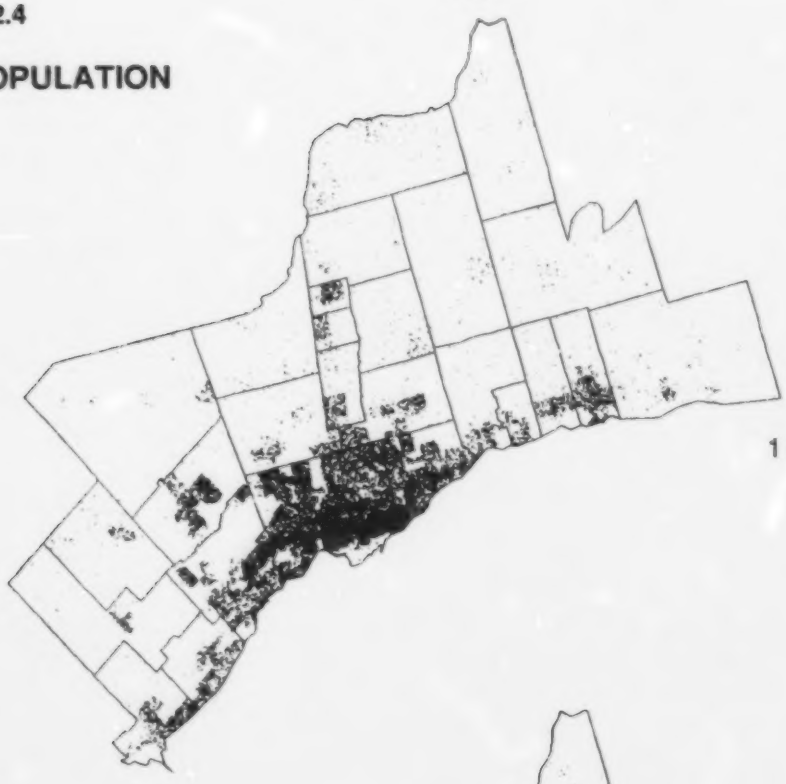
[6] Data was plotted randomly within each GTA traffic zone. This generates an acceptable map except in some large rural zones where the actual distribution may be more clustered.

[7] Different collection methodologies may result in different Census and Assessment data.

GREATER TORONTO AREA
1986

Figure 2.4

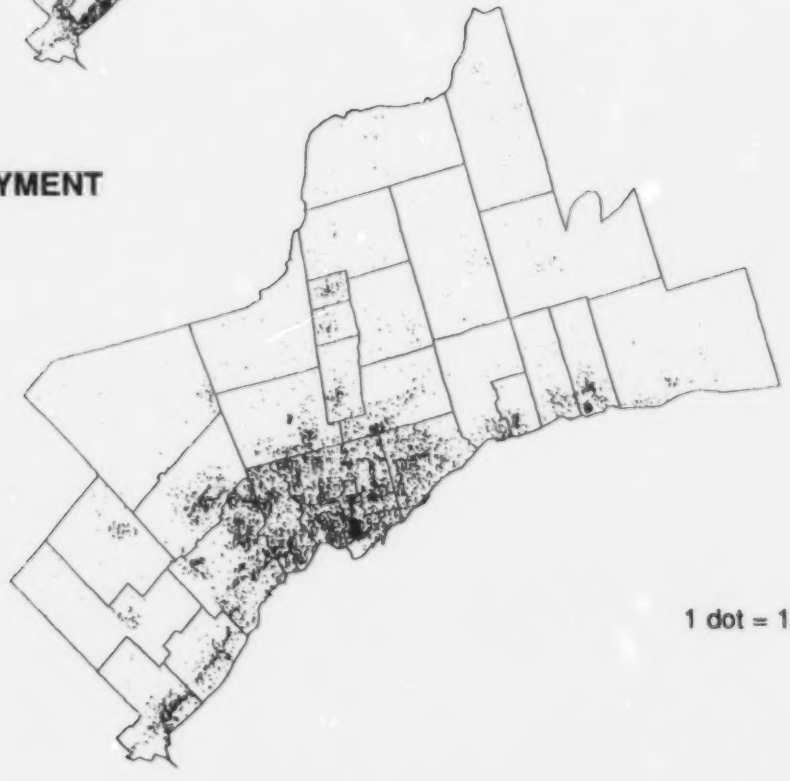
POPULATION



1 dot = 150 persons

Figure 2.5

EMPLOYMENT



1 dot = 150 jobs

The PPH in Metro, shown in Figure 2.8, has declined dramatically from a high of more than four persons in 1951 to just over two and one half in 1989. This decline has resulted from a number of societal changes including the reduction in the number of children per family, the increase in the rate of divorce, the later age at which people marry, the increase in the proportion of seniors and the growth of single person households. The decline in PPH also is related to a number of economic factors including the increasing affluence of the population and the availability of affordable housing. In the future, a change in any one of these factors could affect the PPH and the level of population in Metro.

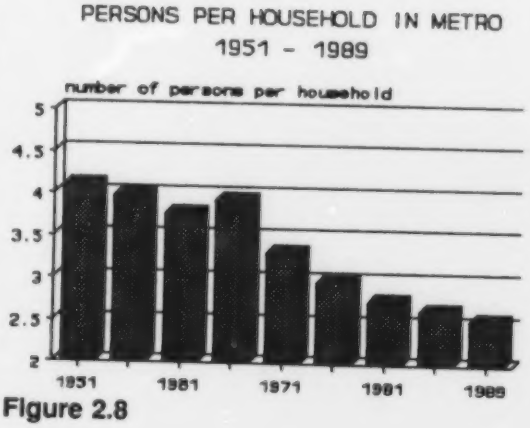


Figure 2.8

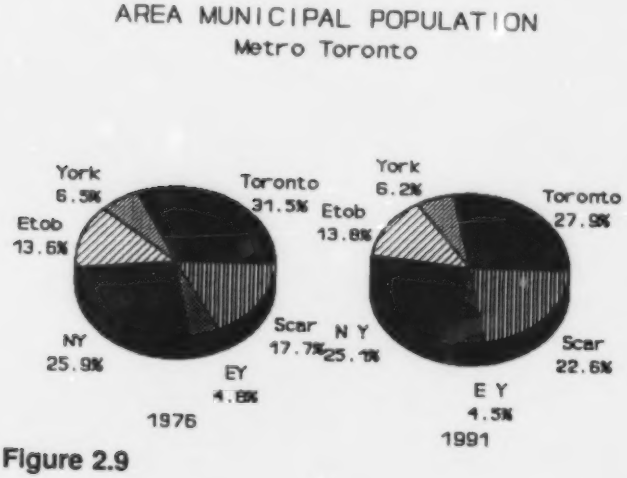


Figure 2.9

The distribution of population among the municipalities of Metro, shown in Figure 2.9 and Table 2.1, has remained relatively stable except for the growth in Scarborough and the decline in Toronto. All other municipalities have experienced relatively slight declines in the number of people since 1976.

Table 2.1 Municipal Population 1976 & 1991

Municipality	1976	1991[8]
Toronto	678,103	598,939
York	139,612	132,290
East York	104,102	97,250
Etobicoke	293,464	295,915
North York	558,067	539,355
Scarborough	380,931	485,240

The distribution of population in 1986 throughout Metro, shown in Figure 2.10 and Appendix Five, illustrates the high density of population in Toronto, York and East York. The enlargement of the Central Area of Toronto shows a very high density of population in the area

[8] Preliminary estimate from the Assessment Branch of the Ontario Ministry of Revenue.

bounded by Parliament, Bay, Bloor and College/Carlton. Centres currently designated in Metro's Official Plan are shown in Figure 2.11 for reference purposes only.

Population change between 1986 and 1991, which is shown in Figure 2.12, was estimated using development applications and housing units added or deleted from the assessment roll. It incorporates the recent increase in housing activity evident in Figure 2.7. The areas of declining population which are spread throughout Metro, are largely the result of the continuing decline in the PPH, although they may also be influenced by demolitions or conversions to non-residential use. Areas of population increase include the recent residential redevelopment in the Central Area, particularly along the harbourfront, in the Scarborough, North York and Etobicoke Metropolitan centres and in the Don Mills/Wynford Park area of North York. Some "green field" development is evident in north-eastern Scarborough and north-western Etobicoke.

Past changes in the age distribution of Metro's population, which are shown in Figure 2.13, will affect future estimates as people move through the age cohorts. The relative decline in the 5 to 14 age group will result in a decrease in the younger segment of the working age group in the future and could reduce natural increase (births minus deaths). Similarly, the current bulge in the working age group will cause a rapid increase in the number of seniors in the future.

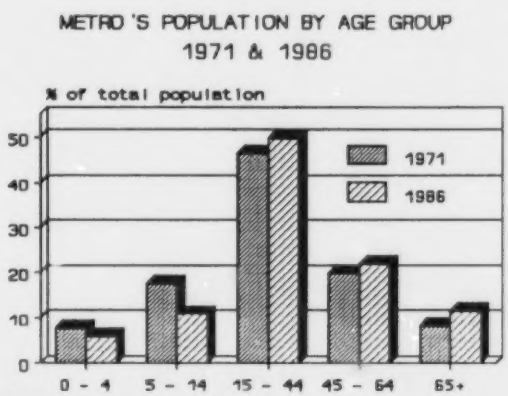


Figure 2.13

2.2.2 Employment

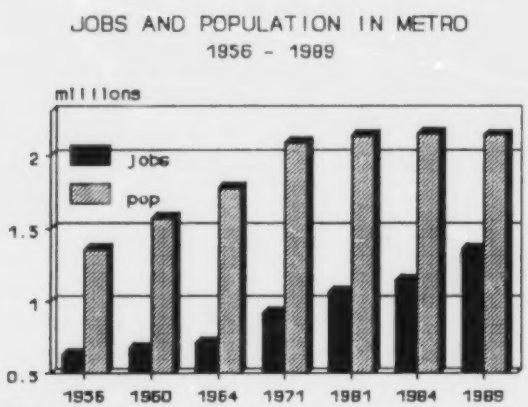


Figure 2.14

There were 1,360,000 jobs in Metro in 1986. During the eighties, jobs increased at a faster rate than population as indicated in Figure 2.14. This rapid growth was due to buoyant economic times in association with increases in both the proportion of the population in the working age, see Figure 2.13, and the labour force participation rate. Employment in 1990 was 1,440,000 based on the Metro Planning Department survey[9].

[9] The Planning Department estimate of 1,350,000 has been adjusted to take into consideration the apparent undercount of work at home and construction activity.

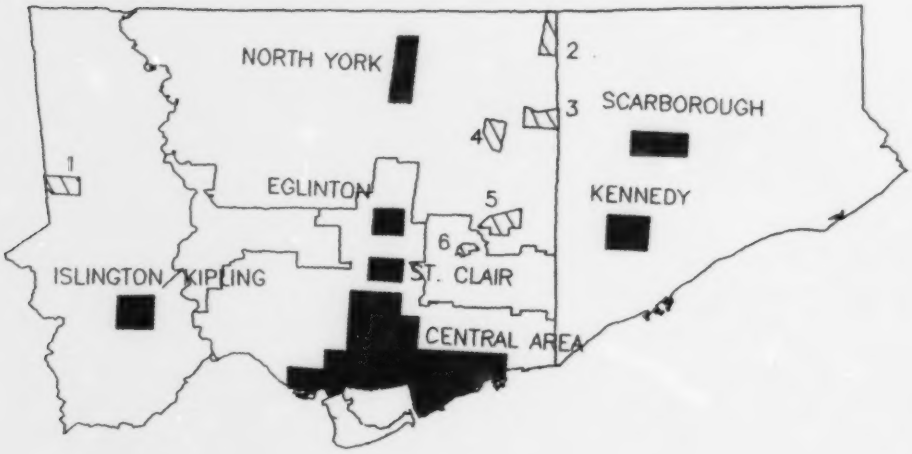
Figure 2.10

1986 POPULATION

1 Dot = 50 Persons

Figure 2.11

CENTRES CURRENTLY DESIGNATED IN THE METRO OFFICIAL PLAN



METRO CENTRES

OFFICE PARKS

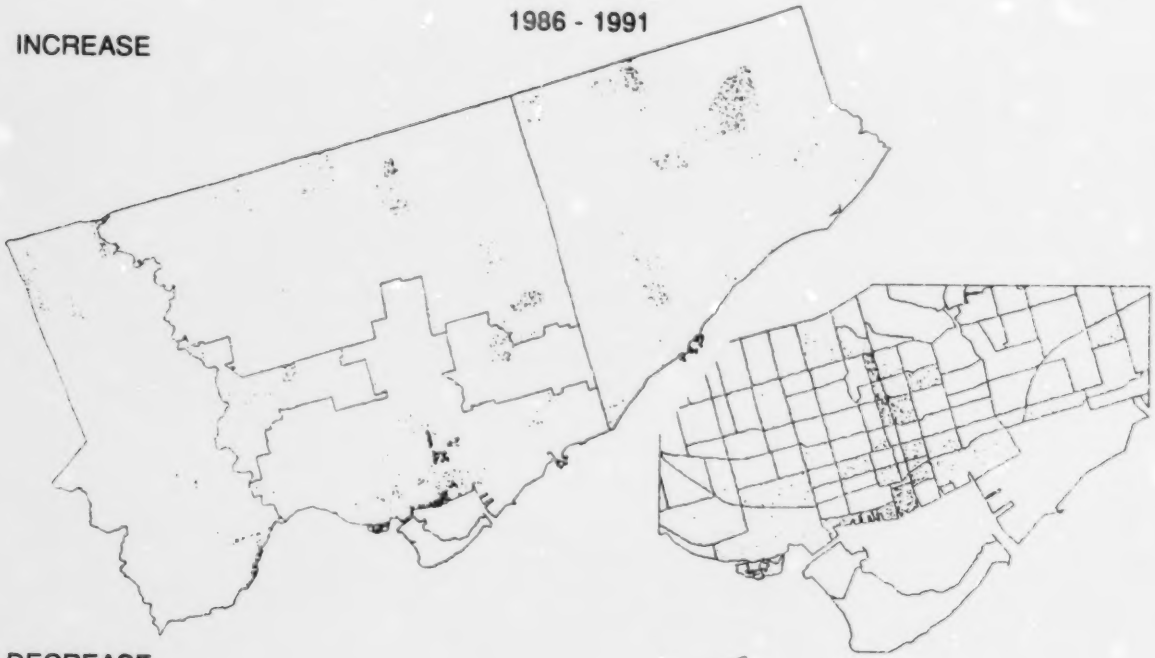
1. Airport Strip
2. Parkway-Finch
3. Consumers Road
4. Duncan Mill
5. Flemingdon Park
6. Thorncliffe Park

Figure 2.12

POPULATION CHANGE[10]

1986 - 1991

INCREASE



DECREASE

1 dot = 25 persons

[10] Calculated from housing stock changes

During the eighties, the labour force participation rate increased significantly as shown in Figure 2.15. The increase was due to the growth of both the working age population and female participation. Male participation, by age, has remained relatively stable over the last two decades except in the 60 plus age groups where early retirement seems to be occurring. The recent decline in the rate, which is associated with the recession, is likely a temporary phenomenon.

The 1990 employment was located in almost 82,000 places of work. Part-time employment, where employees worked less than 30 hours per week, increased from 10% of Metro's employment in 1983 to 17% in 1990.

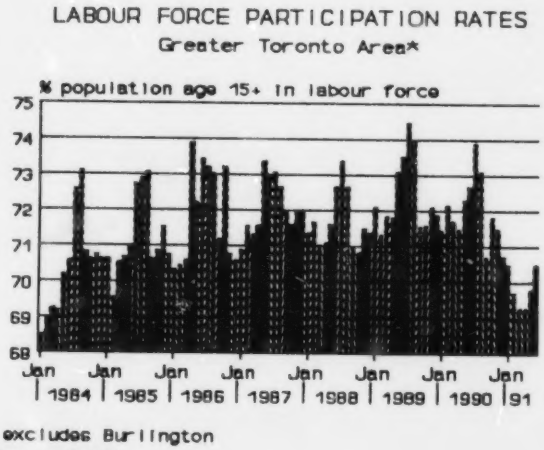


Figure 2.15

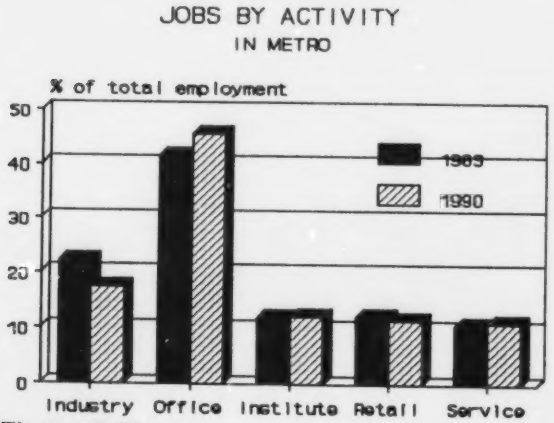


Figure 2.16

The distribution of jobs by activity has shifted largely in concert with changes which have occurred in the National economy. Goods producing activities have experienced a decline in both the number of jobs and the share of employment while employment in the service activities has increased in both respects. This trend, which is reflected in office growth and industrial decline, is illustrated in Figure 2.16.[11] The shares of employment in the other major activities; institutions, retailing and services have remained relatively stable, although the number of jobs in each of these activities has grown.

Table 2.2 Municipal Employment 1983 & 1990

Municipality	1983	1990
Toronto	491,896	590,582
York	33,552	34,157
East York	29,197	30,039
Etobicoke	147,439	186,900
North York	265,723	316,326
Scarborough	135,877	192,026

[11] During the eighties the number of industrial sector jobs in Metro has remained relatively static at approximately 250,000 except for the recent decline between 1989 and 1990.

There have been small shifts in employment shares among municipalities between 1983 and 1990[12] as indicated in Figure 2.17. Toronto, as shown in Table 2.2, has the largest amount of employment, followed by North York, Scarborough and Etobicoke. Between 1983 and 1990, Scarborough and Etobicoke experienced some increase in their share of Metro's employment, while the other municipalities experienced slight declines.

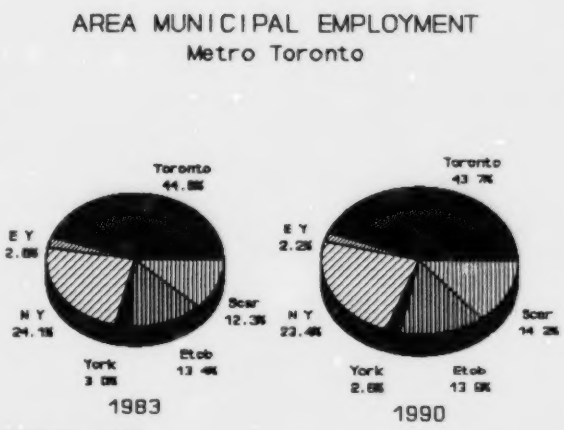


Figure 2.17

The predominance of the Central Area as the employment focus in Metro is depicted in Figure 2.18. As of 1991, more than 30% of the Metro's jobs are located in the Central Area (Appendix Seven). Concentrations of employment are evident in **Metropolitan centres** such as Yonge/ Eglinton, Yonge/St. Clair, and North York and Scarborough City Centres; **office parks** such as Consumer's Road, Parkway/Finch, Thorncliffe/Flemingdon Park and Duncan Mills and **industrial areas** such as the airport, Weston/Finch and Keele/Finch.

Areas of employment increase, shown in Figure 2.19, were concentrated in the Central Area, the Scarborough and North York City Centres, the Yonge/Eglinton centre, Consumers Road and Parkway/Finch office parks and peripheral industrial area such as Tapscott in Scarborough and 427/Albion in Etobicoke. Areas of employment decreases were dispersed although some parts of the Central Area experienced declines.

In Toronto, North York and Etobicoke there are more jobs than resident labour force while in the other three municipalities there are less; Scarborough recently improved its ratio between 1986 and 1990. Employment is significantly in excess of resident labour force in the Central Area, where there are five times more jobs than labour force and in northern Etobicoke (MPD 9), north western North York (MPD 10), northern and central Scarborough (MPDs 16 & 13). A ratio of employment to resident labour force greater than one for areas listed in Appendix Eight means that there are more jobs than labour force in the area.

2.3 *Need for Land Use Scenarios*

Past and current demographic and economic trends are of assistance in estimating Metro's future, especially in the absence of new policy initiatives. Such trends do have implications because of the importance of existing factors in shaping the future. Much of the existing stock of houses and work places will be present long into the future. In the absence of major disasters, factors affecting population growth such as family size, divorce, marriage, infant mortality and life expectancy change at relatively slow rates. In addition, children living in the GTA today will constitute a large portion of the GTA's adult population for decades to come.

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[12] Employment information is available from 1983 when the Planning Department conducted its first survey. Figures for 1991 were not available when this report was prepared.

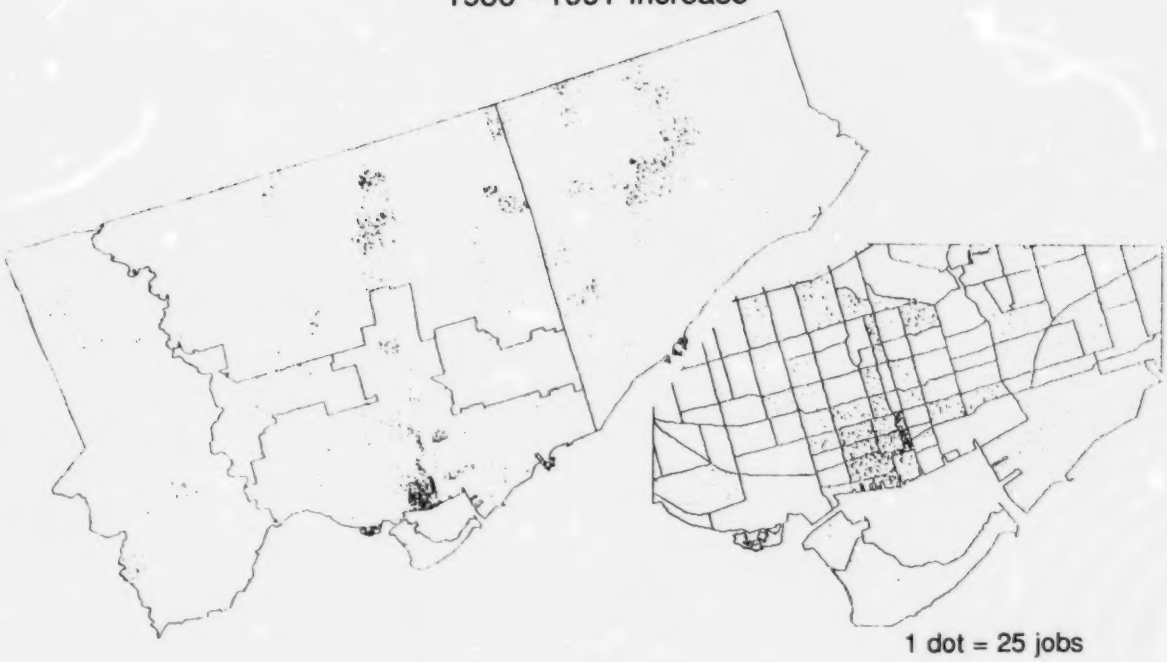
Figure 2.18

1986 EMPLOYMENT

Figure 2.19

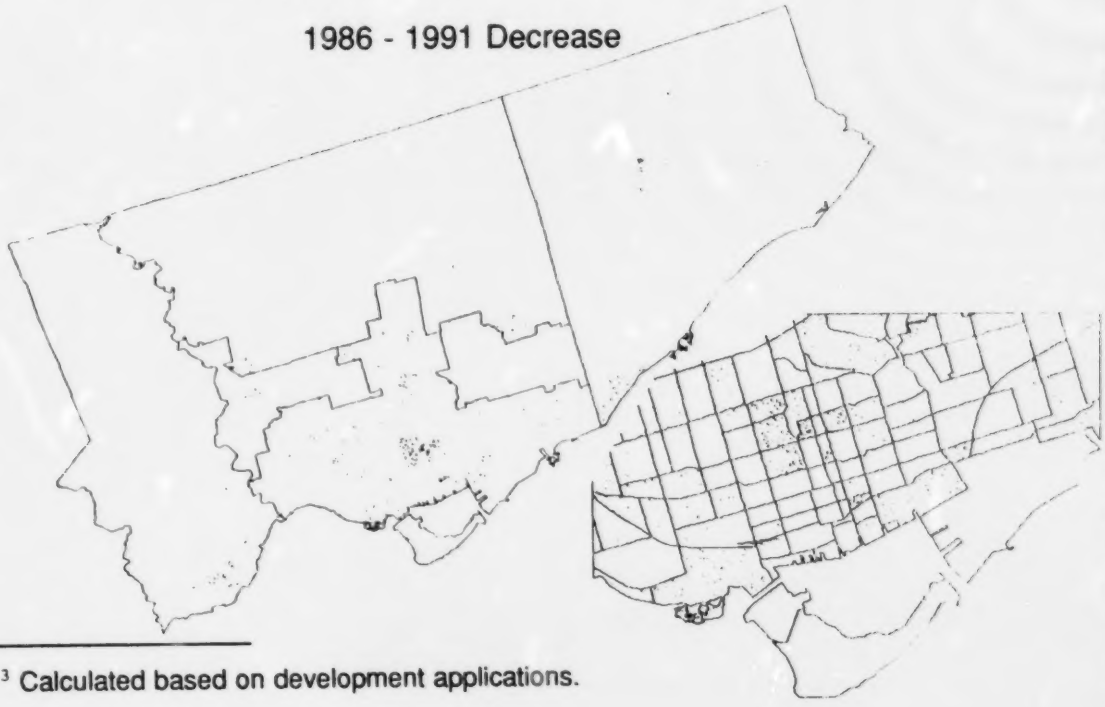
EMPLOYMENT CHANGE[13]

1986 - 1991 Increase



1 dot = 25 jobs

1986 - 1991 Decrease



[13] Calculated based on development applications.

However, past and current trends do not indicate the impact that current development proposals might have on future growth in Metro. Furthermore they do not indicate the future which might be achieved if significantly different development policies are pursued. For example a significant increase in Metro's population will require different approaches than used in the past since little population growth has been achieved in Metro over the previous two decades. The development of alternative policy scenarios help to answer questions about necessary actions and potential implications for Metro in achieving targets.

3. *HOW THE SCENARIOS WERE DEVELOPED*

Two sets of scenarios are developed; the development trend and the policy scenarios. This Chapter describes the basic assumptions underlying the scenarios, the methodology for developing them and the major characteristics of each scenario.

3.1 Basic Assumptions

The land use scenarios are developed within the context of growth in the GTA. By the year 2021 the GTA is forecast to have a population ranging from 5.53 to 6.51 million and employment ranging from 3.03 to 3.62 million as illustrated in Figure 3.1. In studies prepared by consultants[14] the most likely forecast for the GTA for 2021 is 6.02 million people and 3.44 million jobs. These GTA growth figures, which do not incorporate dramatic changes from past trends in the economy and migration to the GTA, were treated as control totals when growth targets were developed for Metro in the **Strategic Plan** and are treated in a similar manner in this study.

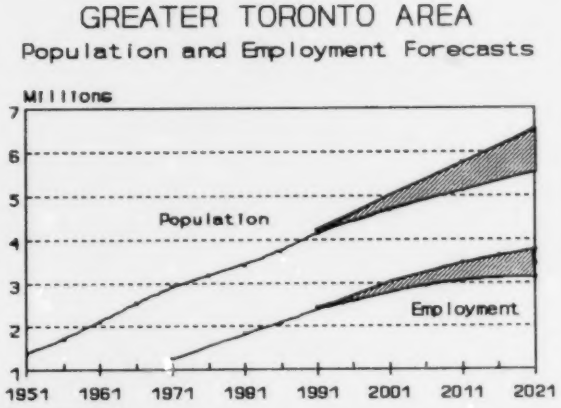


Figure 3.1

For the two development trend scenarios the growth in Metro results from the assumed construction of development applications. **For the three policy scenarios, it was assumed that Metro's Strategic Plan population of 2.8 million would be achieved. Two of those policy scenarios were also examined based on continued long term growth to eventually achieve a Metro population of 3.2 million.** This long term population assumption represents an estimate of the upper limit of growth which could be achieved based on very successful housing intensification programs coupled with constrained growth in the Regions. **For all policy scenarios, it was assumed that Metro's long term employment would be 1.9 million.** This employment assumption was based on the estimate of employment which would be accommodated by the extension of development trends.

In creating the land use scenarios it was assumed that, **within Metro, the number of persons per household (PPH) would continue to decline for each housing structure type, although the rate of decline would be significantly slower than in the past.** The rate of decline in the PPH was assumed to be much slower at the higher Metro population levels since Metro would have to attract more families than at a lower population level. The significance of changes in the PPH within Metro is discussed in chapter two and shown in Appendix two.

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[14] Clayton Research Associates Limited, **Projections of Population and Households in the Greater Toronto Area,** October 1989; and Hemson Consultants, **Employment Forecasts, The Greater Toronto Area to 2031**, October 1989.

It was assumed that **in the future the amount of floor space per employee would not change significantly**. The employment to floor space ratios are described in Appendix One.

3.2 Overview of the Scenarios

Two sets of land use scenarios are developed. Scenarios 1A and 1B are constructed on the basis of development activity while the other scenarios are developed on the basis of growth targets and policy alternatives for the allocation of growth within Metro. The major characteristics of the scenarios are summarized in Table 3.1 and described in the following sections.

Table 3.1

MAJOR CHARACTERISTICS OF LAND USE SCENARIOS

#	NAME	CHARACTERISTICS
1A	Development Trend	addition of development proposals to existing base
1B	Development Trend Extended	addition of development proposals and speculative developments to existing base
2	Corridors & Centres	growth in rapid transit corridors - Yonge, Sheppard East, Bloor & Spadina
3	Nodal/Rail	growth at nodes along rapid transit and rail transit lines
4A	Grid Opportunities	"Main Street" type growth throughout Metro along arterial roads with potential; strong population & limited employment growth in Central Area
4B	Grid Select	"Main Street" type growth in central core of Metro along arterial roads; strong population & limited employment growth in Central Area

3.3 Development Trend Scenarios

Two "Development Trend" scenarios were generated. The **Development Trend Scenario,** represents a future growth and distribution of population and employment based on the construction of all committed and proposed developments, supplemented by the continuation of some past development trends. It is based on the methodology described in Appendix one. Detailed data on the age and sex of the projected population, housing units by structure type, labour force and employed labour force by age and sex and employment by activity were generated only for this scenario. For convenience, this scenario was numbered 1A. The numbering of scenarios does not imply any preference.

The **Development Trend Extended Scenario,** #1B, is based on the development in Scenario 1A and the addition of development arising from some conceptual plans which have not been formally submitted as proposals. These conceptual plans are speculative in nature and required broad interpretations to arrive at estimates of population and employment. Some of the major population and employment characteristics of the Development Trend Scenarios are estimated and shown in table 3.2. "Main Street" and dispersed development has not been

estimated for these scenarios.

Table 3.2

Scenario # 1	DEVELOPMENT TREND (#1A) & EXTENDED (#1B)			
	POPULATION		EMPLOYMENT	
Metro total	2.52 million	2.8 million	1.77 million	1.9 million
Growth in:				
Central Area	58,000	128,000	134,000	168,000
4 Major Centres	59,000	91,000	60,000	75,000
Nodes - designated	13,000	20,000	16,000	24,000
Nodes - proposed	105,000	147,000	49,000	83,000

3.4 Policy Scenarios

Three policy scenarios were developed by a staff working committee consisting of representatives from: Metro Planning Department Policy, Research and Transportation Divisions; the Long Range Rapid Transit Study consultants; the Ontario Ministry of Transportation and the Toronto Transit Commission. This committee defined the distinct policy directions on which each of the scenarios is based, taking into consideration the development trend scenarios, and articulated those policies in terms of population and employment growth. The scenarios were reviewed by senior staff of the agencies represented on the working committee in addition to representatives from the Office of the Greater Toronto Co-ordinating Committee. Although the policy scenarios were prepared within a transportation study context, the intent was to explore land use alternatives independent of transportation requirements.

The policy scenarios developed by the working committee are:

- corridors and major centres,
- nodal/rail, and
- grid.

All of the scenarios include substantial growth in the Central Area, and the Scarborough, North York, Islington/Kipling/Bloor and the combined Yonge/Eglinton/St. Clair major Metropolitan Centres. The levels of population and employment growth in each of these centres vary among scenarios. All of the scenarios assume appropriate **urban design policies** which create attractive places to live and work particularly for families. Such design policies must address the mixing of residential and employment uses, the integration of new developments into established neighbourhoods, and the negative impacts associated with the operations of transportation facilities in proximity to the new residential developments.

The following sections describe the planning initiatives required to achieve each scenario. Maps illustrating the scenarios are in Chapter Five.

3.4.1 Corridors and Major Centres, Scenario #2

This Scenario directs **growth to the following existing and proposed rapid transit corridors**: Sheppard East from Yonge to the Scarborough City Centre, Eglinton West from Yonge to Highway 427, Bloor/Danforth between Victoria Park and Islington, Spadina and Yonge between Eglinton and York Mills/Wilson. This scenario was developed based on a Metro target population of 2.8 and the longer term population of 3.2 million. It would require **better live/work ratios in each of the major centres** than currently exists. The major characteristics of this scenario are shown in Table 3.3

Achievement of growth in the Central Area requires more new housing beyond that anticipated in the Development Trend Scenarios. Employment growth would be slightly higher than expected under the Development Trend. The Central Area would remain the pre-eminent employment focus of Metro but there would be a higher population level providing a better balance in live/work relationships than currently exists in the area. There would be a substantial inflow of commuters to the Central Area necessitating commuter rail improvements particularly under the lower target population.

Table 3.3

Scenario # 2	CORRIDORS AND CENTRES GROWTH		
	POPULATION		EMPLOYMENT
Metro total	2.8 million	3.2 million	1.9 million
Growth in:			
Central Area	150,000	300,000	150,000
4 Major Centres	145,000	240,000	115,000
Corridors	205,000	295,000	160,000
Dispersed	95,000	155,000	75,000

Employment and population growth would have to be stimulated in the four major Metropolitan Centres so as to improve the live/work relationship within each Centre. Development of appropriate office and commercial structures would have to be allowed in each Centre to stimulate employment growth. Housing production, in the form of higher density projects with a mix of tenures and unit types, would have to be encouraged in each Centre. Investments in physical infrastructure in each centre would be required to accommodate this growth.

Densities for residential and commercial/office development need to be increased in the five corridors particularly along Sheppard East, Eglinton West and Bloor. Higher densities are necessary close to rapid transit stations with a gradient of lower densities at increasing distances from the stations. Some form of rapid transit would be required in those corridors where it is lacking, while existing rapid transit facilities in development corridors may require upgrading.

There would be a significant amount of growth dispersed throughout the rest of Metro beyond the centres and corridors described above.

The long term 3.2 million population level has major policy implications. Residential development in the surrounding regions would have to be constrained, with restrictions on such services as sewerage, water supply and transit, to ensure a close match to the targeted population level. Improvements to the commuter rail system would have to be carefully evaluated to ensure that such improvements do not enhance opportunities to live in the regions and work in Metro.

3.4.2 Nodal/Rail, Scenario #3

This scenario **disperses development throughout Metro to a large number of designated and proposed nodes**. Within each node a better live/work relationship would have to be pursued through the balancing of employment and population growth. This scenario was developed only on the basis of the Metro target population of 2.8 million. The major characteristics of this scenario are shown in Table 3.4.

Table 3.4

Scenario # 3 NODAL/RAIL		
	POPULATION	EMPLOYMENT
Metro total	2.8 million	1.9 million
Growth in:		
Central Area	168,000	124,000
4 Major Centres	145,000	111,000
Nodes - designated	60,000	91,000
Nodes - proposed	160,000	148,000
Nodes - Rail	53,000	26,000
Dispersed	14,000	0

Achievement of the population level in the Central Area requires more new housing than in either the Development Trend or the Corridors and Centres scenarios; the employment level would be similar to the Development Trend Scenario. The Central Area would have a better balance in live/work relationships than currently exists and it would remain the pre-eminent employment focus of Metro although there would continue to be a substantial inflow of commuters necessitating improvements to the commuter rail system.

The growth required in the four major Metropolitan Centres would be almost identical to that in the Corridors and Centres Scenario. Policies identical to that Scenario, which promote higher density housing to balance employment growth, would be required.

Total growth in all designated and proposed nodes would be 273,000 people and 265,000 jobs. A balance between population and employment growth would be pursued in all nodes except those which are exclusively employment centres. Metropolitan and area municipal planning policies would have to permit various types of higher density housing, office and commercial developments at each node. Growth outside of the nodes, the Metropolitan Centres and the Central Area would be discouraged in this scenario. Improvements in rail commuter service, including frequent service in both directions, and better linkages with surface transit among nodes would be required.

3.4.3 Grid, Scenarios #4a & #4b

These scenarios **disperse development throughout Metro in the form of medium density, "Main Street" type, development along arterial roads and seek to improve the balance of residents and jobs in the Central Area and along those arterial roads**. The Grid Opportunities Scenario, #4a, directs growth to arterial roads throughout Metro which have the potential for "Main Street" type development, while the Grid Select scenario, #4b, directs "Main Street" development to arterial roads within the older core of Metro. The Grid Opportunities Scenario, #4a, is based on a Metro target population of 2.8 million, while the Grid Select Scenario, #4b, is based on both the 2.8 target and the long term population of 3.2 million. The Grid Scenarios are described numerically in Table 3.5.

Table 3.5

Scenarios #4 GRID - OPPORTUNITIES (#4a) & SELECT (#4b)			
	POPULATION		EMPLOYMENT
Metro total	2.8 million	3.2 million	1.9 million
Growth in:			
Central Area	190,000	255,000	80,000
4 Major Centres - Opportunity	150,000	195,000	60,000
4 Major Centres - Select	160,000		75,000
Arterial Roads - Transit	91,000	190,000	140,000
Arterial Roads - other	150,000	280,000	200,000

The Central Area would remain the pre-eminent employment focus in Metro although this Area would have much less employment growth and more population growth than in all of the other scenarios. The Grid Scenarios would require appropriate growth management policies in the Central Area such as the implementation of transportation improvements which do not promote employment growth and the encouragement of more higher density housing in the Area.

These two scenarios would result in the best live/work relationships in the four major Metropolitan Centres of all of the scenarios. There would be less employment growth in the Metropolitan Centres than in the other policy scenarios. Housing development would need to be

stimulated by encouraging higher density residential projects with a mix of tenures and unit types. An investment in physical infrastructure would be required to accommodate this growth.

Development along arterial roads could add 340,000 jobs and between 241,000 to 470,000 people. Much of this development would be of a medium density, low rise, nature and would be located some distance from existing and proposed rapid transit facilities. The development which would be located near rapid transit stations would be higher in density. To achieve Metro's target population of 2.8 million, the density of development along the arterial roads would have to be slightly higher under the Grid Select scenario, #4b than the Grid Opportunity Scenario, #4a because of the difference in the length of arterial road frontage to be redeveloped. Land use policies would have to allow mixed use residential and employment redevelopment fronting on arterial roads. Extensive surface transit improvements would be required.

4. *INTERPRETATION OF SCENARIOS - GREATER TORONTO AREA*

This chapter presents an interpretation and some implications of the scenarios as they apply to population, housing and employment in the Greater Toronto Area (GTA).

4.1 Population

The future population of the four Regions will be directly related to Metro's population growth. Appendix three specifies estimates of the future population of each of the Regions of the GTA using three long term population levels for Metro (2.5, 2.8 and 3.2 million) while Figure 4.1 illustrates the total population of the four Regions combined. Given the GTA long term population forecast of six million, the population of the four Regions could range from 2.8 to 3.5 million depending upon Metro's long term population.

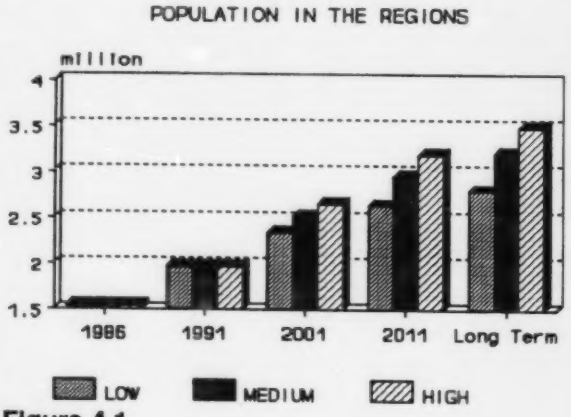

Figure 4.1

If the Regions were to grow from 3.2 to 3.5 million in the long term, most of the additional population growth would go to York and Durham. Halton would increase slightly under these circumstances, while Peel's population would remain static primarily because of land constraints in Mississauga. Conversely, if the Regional long term population were 2.8, rather than 3.2 million, all Regions would experience significant reductions in population growth, with particular emphasis on York and Peel.

Figure 4.2 shows only population **growth** for each of the three GTA land use scenarios. These maps clearly show that **if Metro's population were to increase to 3.2 million, rather than 2.5 million, there would be less need to convert additional rural land to urban uses.** The GTA's urban area would be visibly reduced, especially furthest from the urban core.

4.2 Housing

In order to accommodate the GTA forecast population of six million, it is estimated that almost one million housing units[15] would be added to the 1986 stock of 1.3 million occupied units. This assumes a long term decline in the number of persons per household (PPH) from 2.9 in 1986 to 2.6. The total number of new housing units would be slightly greater than one million depending upon future vacancy rates.

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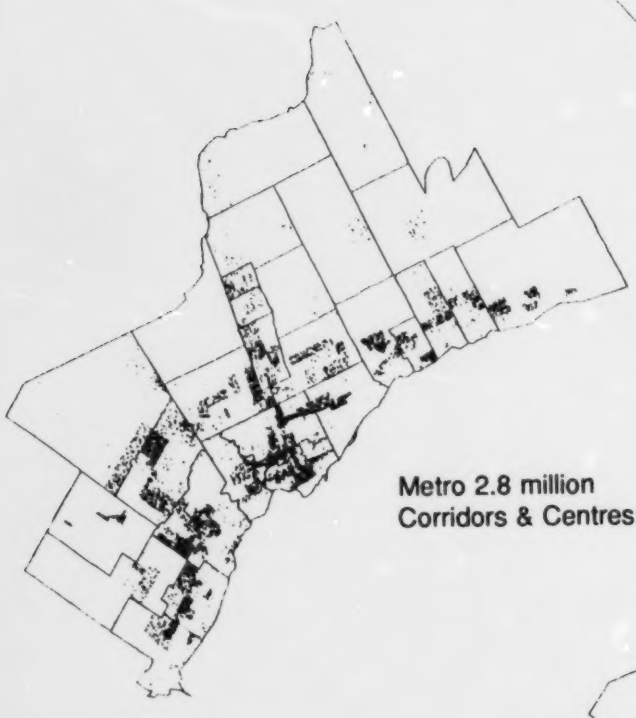
[15] Clayton Research Assoc. used a lower PPH than this study and estimated that the GTA would require 1.1 million additional units for 6.02 million people in **Projections of Population and Households in the Greater Toronto Area,** October 1989.

Figure 4.2

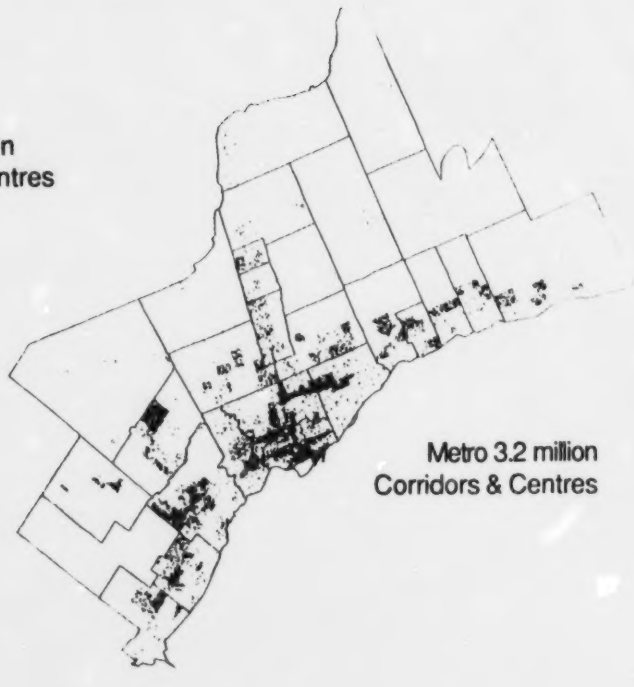
LONG TERM
GTA POPULATION GROWTH

Metro 2.5 million
Development Trend

1 Dot = 100 Persons



Metro 2.8 million
Corridors & Centres



Metro 3.2 million
Corridors & Centres

There are expected to be significant regional variations in the distribution of housing among the scenarios as shown in Figure 4.3. Metro would have to obtain more than 50% of new housing in the GTA over the long term if it were to achieve a population of 3.2 million. In this situation Metro would have to improve its position in the regional housing market significantly since it has only accounted for 28% of GTA housing completions during the eighties. Even if Metro is to achieve a population of 2.5 million almost 30% new housing in the GTA would have to be constructed in Metro.

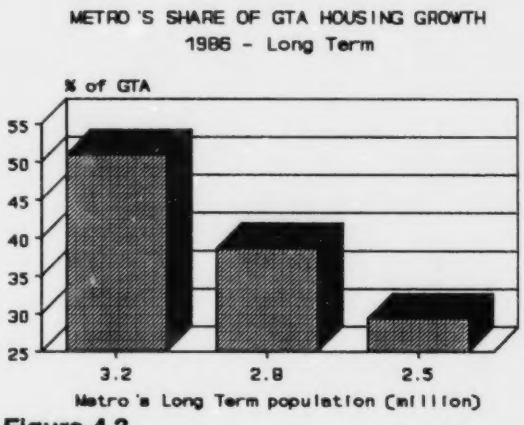


Figure 4.3

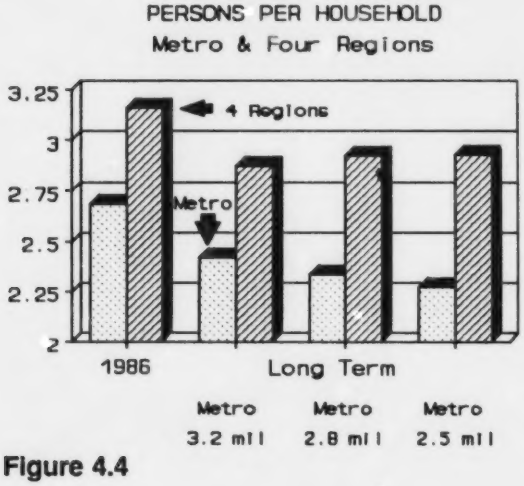


Figure 4.4

The distribution of new housing required for the scenarios is expected to have an impact on the PPH as indicated in Figure 4.4. All Regions are expected to experience a decline in the PPH although the decline is expected to vary depending upon the population distribution within the GTA. If Metro grows to 3.2 million people, it will have to compete more successfully in the family housing market with the result that the expected PPH would be 2.42. This compares to an expected PPH of 2.27 if Metro achieves a population of 2.5 million. In contrast, when Metro has a high population, the Regions would experience a sharper decline in the PPH than when Metro has a low population.

4.3 Employment and Resident Labour Force

An increase in the divergence between where people live and where they work could result in more transportation facilities being required and people spending more of their time commuting to work. While this section does not estimate the amount of commuting which would occur, estimates of future jobs and labour force[16] are useful in understanding potential demands on the transportation system.

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[16] In this report, employment or jobs is the number of people by their **place of work**. Labour force is the number of working people by their **place of residence**.

Since the GTA is projected to have 3.4 million jobs in the long term, the job growth in the four Regions would be inversely related to job growth in Metro. Figure 4.5 shows the expected timing of job growth in the Regions over the long term. If Metro achieves 1.9 million jobs, there will be less pressure for commercial development in the Regions. If Metro's employment is 1.77 million, Peel and York Regions are expected to absorb most of the additional Regional employment growth as indicated in Appendix four.

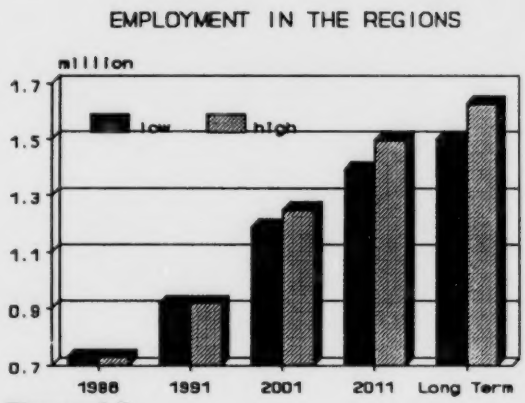


Figure 4.5

The growth of employment is expected to occur in a ring around Metro, as shown in Figure 4.6, with some growth occurring in corridors east and west of Metro along Lake Ontario, north on Yonge Street and west along Highway 401. **As jobs are increased in Metro, the need to expand the GTA urban area would be reduced.**

The number of jobs in the GTA are expected to grow at a faster rate than the labour force living in the GTA as shown in Appendix four. Consequently **net commuting to the GTA is expected to increase by approximately two to three times the 1986 level** of 59,000. This is expected to have impacts on the GTA transportation system.

The labour force living in Metro declined between 1986 and 1991 despite the increase in population. This phenomenon, shown in Appendix four, is primarily due to the increase in Metro's population in the older age groups with the number of residents leaving the labour force exceeding the number entering. Beyond 1991, population growth in Metro is expected to generate a slight increase in resident labour force. The larger the growth of Metro's population, particularly in the working age groups, the greater would be the growth of the resident labour force.

In 1986, there were approximately 160,000 more jobs in Metro than labour force. This imbalance, shown in Figure 4.7, would grow to half a million if Metro's population were 2.5 million. The more successful Metro is at increasing its level of population, the less the growth in pressure that will be placed on the transportation system to service commuters who live in the Regions, but work in Metro.

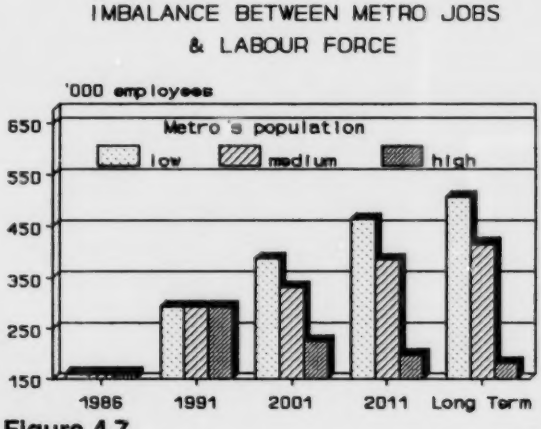
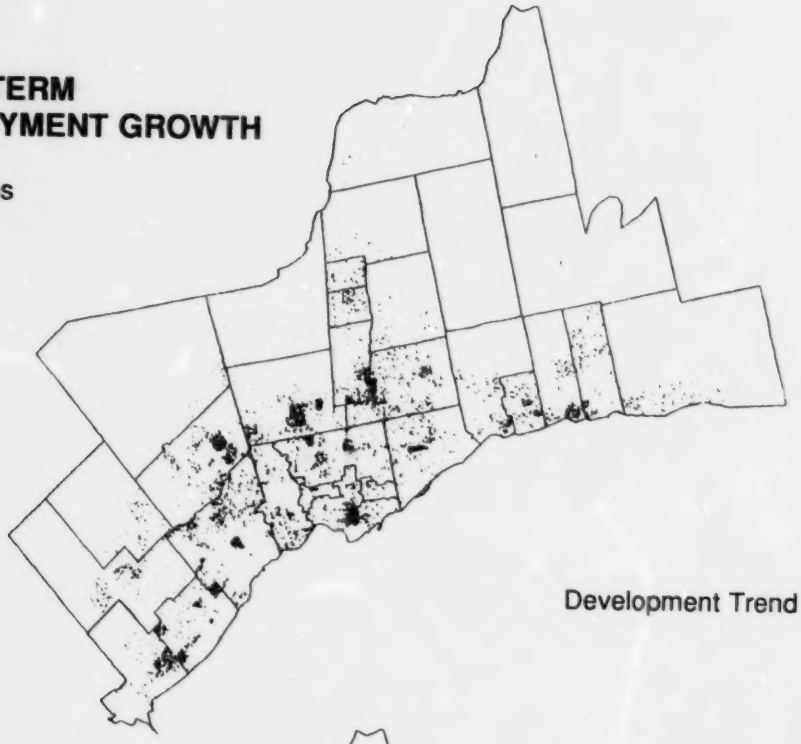


Figure 4.7

Figure 4.6

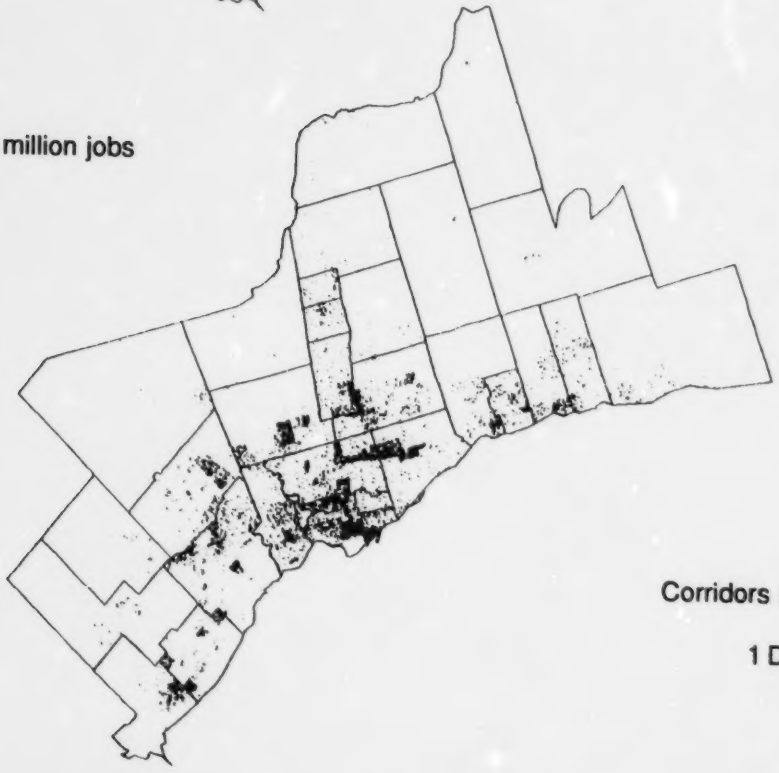
LONG TERM GTA EMPLOYMENT GROWTH

Metro = 1.7 million jobs



Development Trend

Metro = 1.9 million jobs



Corridors & Centres

1 Dot = 100 Jobs

5. *INTERPRETATION OF SCENARIOS - METROPOLITAN TORONTO*

This chapter presents an interpretation of the scenarios and some implications of those scenarios as they apply to Metropolitan population, housing and employment.

5.1 Population by Land Use Scenario

5.1.1 Development Trend Scenarios

The **Development Trend Scenario (#1A)**, with a long term population of 2.52 million for Metro, exhibits a strong growth focus in the major Metropolitan Centres, specifically the Central Area, and the Scarborough, North York and Islington/Kipling/Bloor Centres and the York City Centre as shown in Figure 5.1. Population in the Central Area is expected to increase from 155,000 in 1991 to 213,000 in the long term and growth is expected to occur along the Harbourfront, east of Yonge Street (Ataratiri), on the railway lands and between University and Jarvis, south of Bloor. Within Toronto some development also is expected north of the Exhibition. Beyond Toronto and the Centres, some growth is expected in the corridors along Sheppard, east of Yonge and along the Etobicoke waterfront, the latter reflecting residential redevelopment. There are three additional growth nodes; York University, a portion of the Downsview airport and the St. Michael's lands in York and Toronto. Some "Main Street" redevelopment is expected in Toronto and along arterial roads such as Bathurst in North York where permitted. The estimated municipal population under this scenario is shown in Table 5.1.

Table 5.1

DEVELOPMENT TREND SCENARIOS - POPULATION ('000)					
Municipality		TREND		TREND EXTENDED	
	1990	2011	Long Term	2011	Long Term
Toronto	595	679	690	759	789
York	133	160	165	172	191
East York	95	105	106	116	120
Etobicoke	296	355	365	377	392
North York	548	631	647	685	715
Scarborough	471	539	549	580	600

The **Development Trend Extended Scenario (#1B)**, with a long term population of 2.8 million for Metro, has a stronger growth focus on the Metropolitan Centres than the Development Trend Scenario as shown in Figure 5.2. Growth in the Central Area, with a long term population of 282,000, is focused along the harbourfront extending to the Exhibition lands. In this Scenario Greenwood racetrack and some industrial areas are expected to convert to residential uses. Additional population growth, beyond the Development Trend Scenario, arises from more

POPULATION INCREASE

Figure 5.1

#1A DEVELOPMENT TREND

Figure 5.2

#1B DEVELOPMENT TREND EXTENDED

1 Dot = 25 persons

development: along the corridors, along "Main Streets" throughout Metro particularly in Toronto,East York and York, at York University and Downsview, at some regional shopping centres, through residential conversions in some industrial areas and in large holdings such as Woodbine racetrack in Etobicoke. The municipal population for this scenario is shown in Table 5.1.

5.1.2 Policy Scenarios

The **Major Corridors and Centres Scenario (#2)**, with a long term population of 2.8 and 3.2 million in Metro, has a stronger focus of growth in the Major Metropolitan Centres when compared to the Development Trend Scenarios. In Scenario #2 the long term Central Area population would be double to triple the current population. Within the Central Area it is expected that growth would exceed the Development Trend Scenario in the area west of University Avenue and south of College and on the Toronto port lands. The Sheppard East, Spadina, Eglinton and Bloor corridors stand out as growth areas in this Scenario as shown in Figure 5.3. Although some dispersed population growth is anticipated, this Scenario implicitly would limit development outside of the corridors and centres particularly at York University, Downsview and the Etobicoke waterfront. The municipal population for this scenario is shown in Table 5.2.

Table 5.2

MAJOR CORRIDORS & CENTRES SCENARIOS - POPULATION ('000)					
Municipality		Metro 2.8 million		Metro 3.2 million	
	1990	2011	Long Term	2011	Long Term
Toronto	595	824	870	981	1,067
York	133	116	173	174	183
East York	95	105	106	109	110
Etobicoke	296	357	368	386	403
North York	548	666	691	735	777
Scarborough	471	574	593	629	661

In the **Nodal/Rail Scenario (#3)**, with a long term Metro population of 2.8 million, growth in the Major Metropolitan centres is similar to Scenario #2 although greater than the Development Trend Scenarios. The long term Central Area population is expected to be 328,300 in Scenario #3, more than in either the Development Trend or Corridors and Centres Scenarios. Within the Central Area in Scenario #3 residential development would occur on the Greenwood racetrack but not on the port lands. Growth in the North York, York, Scarborough and Islington/Bloor/ Kipling Centres is identical to the Major Corridors and Centres Scenario. There are more growth nodes such as south-western Scarborough, north-eastern Etobicoke, the Sherway gardens area, Weston, Flemingdon Park and Don Mills as illustrated in Figure 5.4 than in the Development Trend Scenario. Implicitly Scenario #3 would require the stimulation of development in a number of centres where development pressures do not currently exist. The municipal population for this

Figure 5.3

POPULATION INCREASE

#2 MAJOR CORRIDORS AND CENTRES

Scenario is shown in Table 5.3.

Table 5.3

NODAL/RAIL SCENARIO - POPULATION ('000)			
Municipality		Metro 2.8 million	
	1990	2011	Long Term
Toronto	595	806	848
York	133	164	170
East York	95	106	106
Etobicoke	296	379	395
North York	548	658	681
Scarborough	471	579	599

The **Grid Opportunities (#4a)** and the **Grid Select (#4b)** Scenarios, with a long term Metro population of 2.8 million and, in the case of the Grid Select (#4b) 3.2 million, have more growth in the Central Area and the major Metropolitan Centres than the Development Trend Scenarios. Growth in the Centres is similar to growth in Scenarios #2 and #3. The Central Area is estimated to grow to its highest level, 340,300 with Metro at 2.8 million and 405,000 with Metro at 3.2 million. Within the Central Area, the distribution of growth is similar to Scenarios #2 and #3 although no residential development is assumed on the port lands. In areas of Toronto, East York and York there would be a relatively even distribution of growth outside of the Centres as shown in Figures 5.5 and 5.6 reflecting the "Main Street" program. There is a slightly higher density of development in this area under Scenario #4b than under Scenario #4a. In North York, Scarborough and Etobicoke, growth is spread widely outside of the Metropolitan Centres although less growth is expected in north-west Etobicoke and north-east Scarborough in Scenario #4b than #4a. The municipal population for these scenarios is shown in Table 5.4.

Table 5.4

GRID SCENARIOS - POPULATION ('000)							
Municipality		Metro 2.8 million				Metro 3.2 million	
		Grid Opportunities		Grid Select		Grid Select	
	1990	2011	Long Term	2011	Long Term	2011	Long Term
Toronto	595	833	882	827	875	938	1,013
York	133	157	162	158	163	182	193
East York	95	108	109	108	109	118	122
Etobicoke	296	371	385	360	370	399	419
North York	548	647	667	667	692	742	785
Scarborough	471	577	596	573	591	635	668

POPULATION INCREASE

Figure 5.4

#3 NODAL/RAIL

Figure 5.5

#4A GRID OPPORTUNITIES

1 Dot = 25 Persons

Figure 5.6

POPULATION INCREASE

#4B GRID SELECT

These Scenarios would require substantially more residential development in the Central Area than in the Development Trend scenario. The "Main Street" program would have to be implemented throughout Metro, although under the Grid Select Scenario (#4b) its implementation would be in a more confined area than the Grid Opportunity Scenario (#4a). Development at nodes such as York University, Downsview and along the lakeshore in Etobicoke would be limited in these Scenarios.

5.2 *Changes in the Age of the Population*

This section describes possible changes in the distribution of Metro's population by age. Although the Development Trend Scenario was used as the basis for this analysis, other Scenarios are discussed.

5.2.1 *The Under 15 Age Group*

The under 15 age group accounted for almost 17% of Metro's population in 1986, a sharp decline from 25% in 1971. The percentage of the population in this age group is expected to continue to decline slightly although the number of births is expected to increase during the short term due to the growth of the population in the child bearing years. Under the Development Trend Scenario, this age group could account for 16.2% of Metro's population by the year 2011. This age group could account for a slightly higher percentage of the population if higher growth is achieved resulting in more family households in Metro.

It is expected that this age group will decrease throughout Metro except in areas where there will be significant increases in housing. In the Central Area this age group is expected to grow because of the large number of new housing units expected even though most units will not be for families. Only in the Grid Scenarios is it likely that this age group will not decline throughout Metro, since these Scenarios spread development throughout Metro.

Service needs of the under 15 age group are expected to decline throughout Metro except in growth areas. The decline in this age group will have an impact on education and day care facilities with stable residential areas likely experiencing reductions in the number of potential clients while growth areas, such as the Central Area, likely experiencing pressure to expand facilities. Public transit could experience a drop in riders in areas where the under 15 age group is declining because of the dependence of this group on transit. If the long term population of Metro grows beyond 2.5 million, there will be less reduction in the service needs of this group.

5.2.2 *The Working Age Group 15 - 64*

The 15 to 64 age group accounted for 71.6% of Metro's population in 1986, a noticeable increase from 66.5% in 1971. Both the younger (15 to 44) and older (45 to 64) segments of this age group increased their share of the total Metro population. Although the working age group is expected to continue to grow in absolute numbers, it is expected to maintain its current share of Metro's population accounting for 70.4% of the 2011 population. Within this age group significant changes are expected with the younger segment experiencing a decline in its share

from 50% to approximately 40% of the population, while the older segment experiencing an increase, from 22% to 31%, by the year 2011. The shift from the younger to the older segment of the working age group is not expected to be as dramatic if Metro's long term population grows beyond 2.5 million since more young families are expected to live in Metro.

The distribution of the growth of the working age population within Metro is expected to mirror housing growth patterns. In the Development Trend scenario this is expected to occur in the Metropolitan centres including the Central Area, the Scarborough, York, North York and Islington/Kipling/Bloor Centres; in the fringe areas of Scarborough and North York; and in corridors along Sheppard East and the Lakeshore in Etobicoke.

Many growth areas for the working age population are on existing or planned rapid transit facilities resulting in increased opportunities to use transit. This age group's growth in the Central Area may assist in balancing employment growth providing greater opportunities to walk to work or to use transit. However, the growth in the older segment of the working age group could adversely impact transit since this group tends to be more affluent and have greater access to automobiles. The growth of this group could place greater demands on assisted housing and welfare. In addition, other services such as recreation and public health may have to reorient their focus to service the different requirements of this growing age group.

5.2.3 The Seniors Age Group - 65+

In 1986, seniors accounted for almost 11.5% of Metro's population, a sharp increase from more than 8% in 1971. Although seniors are the smallest of the three age groups examined, it has the fastest growth rate. By the year 2011, it could account for 13.4% if Metro achieves a population of 2.5 million. The growth in the proportion of this age group would not be as great if Metro achieves higher population levels.

This age group is expected to increase almost everywhere throughout Metro. The growth of this age group is expected to be faster in areas where significant increases in housing units are expected than in stable residential areas.

It is expected that this age group's growth will increase the demand for health care services at a rate faster than Metro's total population growth since this group has a higher per capita use of such services than other age groups. The growth of the seniors age group will increase the demand for such Metro services such as ambulance, assisted housing and home care. Since seniors are only marginal participants in the labour force, this age group's growth is not expected to significantly increase peak hour demands on the transportation system. However this age group's growth is expected to increase both the need to improve access to the transit system (e.g., more escalators) and the demand transit for the handicapped. New or expanded police services targeted for seniors may be required since this group tends to be more vulnerable and conscious of their security.

5.3 Housing Requirements

The total long term housing stock required in Metro, excluding any allowance for

demolitions, varies with the assumed population as indicated in Table 5.5 and Appendix six.

Table 5.5

Metro Long Term Housing Requirements ('000)						
Metro Long Term Population	2.5 million		2.8 million		3.2 million	
	2011	Long Term	2011	Long Term	2011	Long Term
Housing increase from 1989	172.0	227.6	233.0	317.0	325.0	437.0
Average annual increase	7.8	7.1	10.6	9.9	14.8	13.7
Total Units	1,056.0	1,111.6	1,117.0	1,202.0	1,209.0	1,321.1
PPH	2.38	2.27	2.42	2.33	2.49	2.42

In 1989 there were approximately 884,000 occupied housing units in Metro. If Metro were to achieve the 3.2 million long term population it would require almost twice as many new units as a population of 2.5 million. Metro would have to substantially increase both its competitive position in the GTA housing market and its production of new housing to achieve the higher population. During the eighties housing production in Metro averaged 9,150 units. The average annual housing unit production, excluding demolitions, over the long term would range from 7,100 to 13,650. There would be a slightly higher rate of new housing production in Metro up to the year 2011 since it is expected that growth will occur at a faster rate before rather than after 2011. New housing, taking demolitions into consideration, required for a population of 2.5 million would be consistent with recent production levels, while higher population levels would require major increases in the amount of new housing produced in Metro and a greater acceptance in the market place of the medium density housing.

Table 5.6

TOTAL HOUSING UNIT ('000) RANGE					
Municipality		----2011----		---Long Term---	
	1990	Low	High	Low	High
Toronto	290	332	464	350	521
York	57	65	73	70	79
East York	45	47	53	49	57
Etobicoke	117	140	152	149	164
North York	207	246	275	265	299
Scarborough	178	206	227	217	245

Table 5.6 shows that all municipalities would have to increase their housing stock under all scenarios, but the range of increase would be especially high in Toronto. For all municipalities, except for Toronto and East York, the highest level of housing production is required under the

Grid Select Scenario with a long term population of 3.2 million. In Toronto the largest housing requirement, an 80% increase above the existing stock, occurs under the Corridors and Centres Scenario at 3.2 million. The smallest housing unit requirement for all municipalities, except in York and East York, occurs under the Development Trend Scenario when Metro's population is 2.5 million. In York and East York, the smallest housing unit requirement occurs under the Corridors and Centres Scenario.

The housing unit growth in the Central Area is expected to be substantial under all scenarios, increasing from 78,500 in 1990 to a low of 120,200 under the Development Trend and a high of 248,000 under the Corridors and Centres. Almost all scenarios require an increase in housing in this area above levels currently planned and contemplated.

5.4 Employment by Land Use Scenario

5.4.1 Development Trend Scenarios

The **Development Trend Scenario, #1A**, with a long term Metro employment of 1.77 million, focuses of employment growth in the Central Area and to a much lesser extent, in the North York and Scarborough City Centres as shown in Figure 5.7. Other important growth areas include York University, York City Centre, Islington/Bloor/Kipling, Thorncliffe Park and the Etobicoke lakeshore. Since population is expected to grow faster than employment, the ratio of employment to resident labour force would increase notably except in the Central Area, where the substantial growth of population is expected to balance employment. The estimated municipal employment is listed in Table 5.7.

The **Development Trend Extended Scenario, #1B,** with a long term Metro employment of 1.9 million, focuses additional employment growth in the Central Area, Scarborough City Centre, York University and Downsview as shown in Figure 5.8. The expected ratio of employment to resident labour force would remain the same as 1991 due to substantial population growth. In the Central Area, the ratio of employment to labour force is expected to decline dramatically from the 1986 level as a result of the rapid growth of population. The estimated municipal employment for this scenario is shown in Table 5.7.

Table 5.7

DEVELOPMENT TREND SCENARIOS - EMPLOYMENT ('000)					
Municipality		TREND		TREND EXTENDED	
	1990	2011	Long Term	2011	Long Term
Toronto	591	745	773	781	817
York	35	44	45	46	48
East York	30	37	38	39	40
Etobicoke	187	226	233	241	251
North York	316	404	417	436	455
Scarborough	192	259	267	276	289

EMPLOYMENT INCREASE

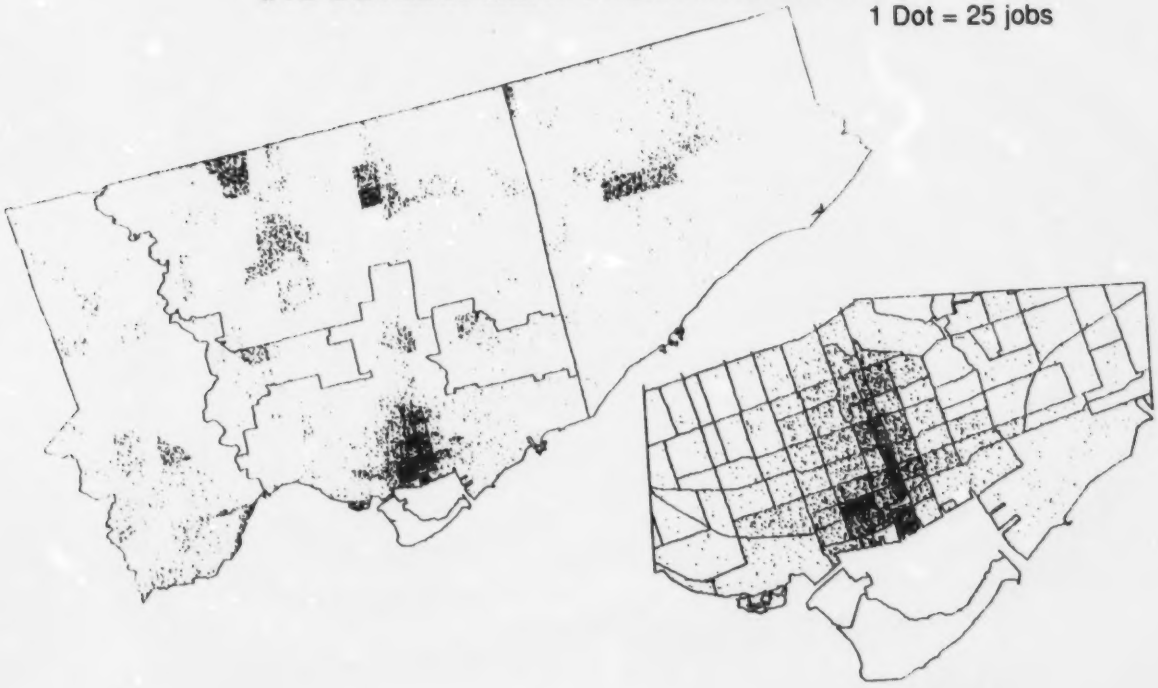
Figure 5.7

#1A DEVELOPMENT TREND

Figure 5.8

#1B DEVELOPMENT TREND EXTENDED

1 Dot = 25 jobs



5.4.2 Policy Scenarios

Employment growth in the **Major Corridors and Centres Scenario, #2** is concentrated in selected rapid transit corridors outside of the Metropolitan Centres as shown in Figure 5.9. Employment growth in the Central Area is similar to the Development Trend, although more growth is expected on the port lands. There is a slightly stronger emphasis on growth in the four major Metropolitan centres than in the Development Trend Scenarios. The employment growth beyond the centres and corridors would be limited. The estimated municipal employment is shown in Table 5.8.

Table 5.8

MAJOR CORRIDORS & CENTRES SCENARIOS - EMPLOYMENT ('000)			
Municipality	1990	2011	Long Term
Toronto	591	801	842
York	35	60	65
East York	30	36	37
Etobicoke	187	229	237
North York	316	416	431
Scarborough	192	276	289

In the **Nodal/Rail Scenario, #3**, there is much more peripheral employment growth in Metro, particularly in Etobicoke and North York as shown in Figure 5.10, due to the development of a large number of nodes. Employment growth in the Central Area is slightly lower than under the Development Trend Scenario while growth in the four major Metropolitan centres is higher but similar to the Corridors and Centres Scenario. Within the Central Area, employment growth is more dispersed through development of the port, Exhibition Place and the King/Spadina area. The estimated municipal employment is shown in Table 5.9

Table 5.9

NODAL/RAIL SCENARIO - EMPLOYMENT ('000)			
Municipality	1990	2011	Long Term
Toronto	591	763	795
York	35	52	56
East York	30	40	42
Etobicoke	187	250	263
North York	316	440	461
Scarborough	192	273	285

EMPLOYMENT INCREASE

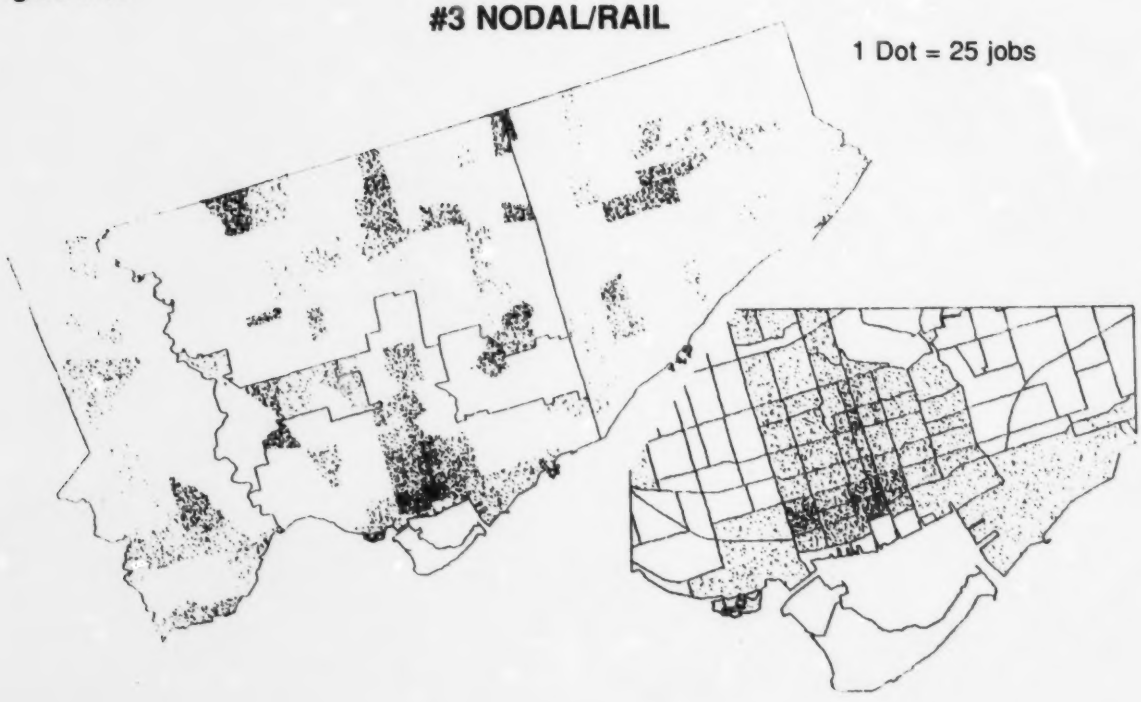
Figure 5.9

#2 MAJOR CORRIDORS & CENTRES

Figure 5.10

#3 NODAL/RAIL

1 Dot = 25 jobs



Both **Grid Scenarios, #4**, shown in Figures 5.11 and 5.12, disperse growth throughout Metro based on a "Main Street" type development. The density of development is a slightly higher under the Grid Select than the Grid Opportunities Scenario. In both Scenarios employment growth in the Central Area is relatively low implying municipal policies constraining employment below the growth anticipated in the Development Trend. Employment growth in the four major Metropolitan Centres is identical to the Development Trend and lower than either the Major Corridors and Centres or Nodal/Rail Scenarios. The Grid Scenarios would require innovative municipal policies for office development along arterial roads to promote office employment growth. Table 5.10 shows the municipal employment for the Grid Scenarios.

Table 5.10

GRID SCENARIOS - EMPLOYMENT ('000)					
Municipality		Grid Opportunities		Grid Select	
	1990	2011	Long Term	2011	Long Term
Toronto	591	751	780	763	795
York	35	65	71	67	73
East York	30	44	47	44	47
Etobicoke	187	251	264	234	243
North York	316	424	440	435	455
Scarborough	192	284	298	275	287

5.5 Employment and Resident Labour Force

The relationship between employment and labour force and changes in the relationship in the future have implications, particularly for transportation. This section explores the employment and labour force relationship **within** Metro. The largest imbalance between employment and labour force of all scenarios is expected in the Development Trend. Those scenarios which encourage additional population growth in Metro improve the balance between employment and labour force.

Currently in the Central Area there are approximately 5.5 jobs for every resident worker as shown in Figure 5.13. The ratio of jobs to labour force would improve only marginally under the Development Trend while in the rest of Toronto the ratio would worsen. Under the Development Trend Extended Scenario the ratio would continue to improve, dropping below four. Although further improvement in the ratio would occur in all policy scenarios, the Grid Scenarios would provide the best balance of jobs and labour

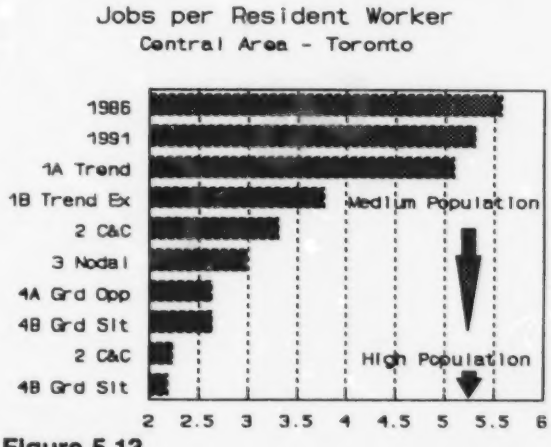


Figure 5.13

EMPLOYMENT INCREASE

Figure 5.11

#4A GRID OPPORTUNITIES

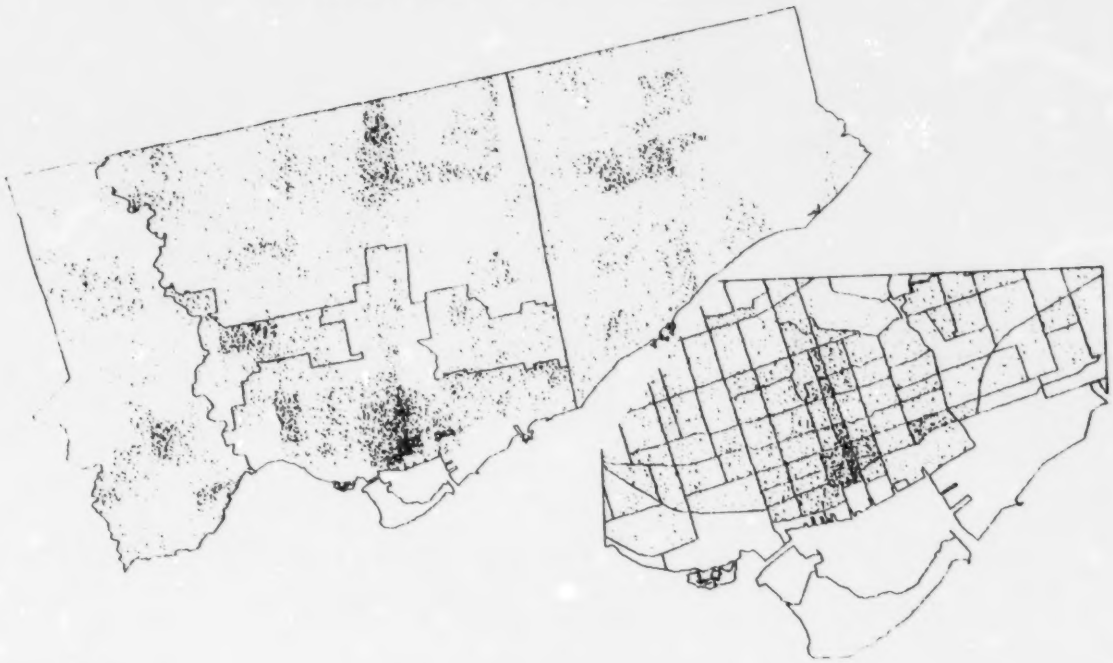


Figure 5.12

#4B GRID SELECT

1 Dot = 25 jobs

force in the Central Area. There would be only a marginal improvement in the ratio when the high Metro population is assumed.

In Figure 5.14, which shows the ratio of jobs and labour force by municipality, the "zero" line represents an equal number of resident workers and jobs. An excess of jobs to workers appears as a positive number, while a deficiency is negative. Currently Toronto, Etobicoke and North York have an excess of jobs over workers while York, East York and Scarborough have a deficiency. The Grid Scenarios achieve the best balance of jobs to workers among the municipalities when the Metro target population is 2.8 million. When the target population is 3.2 million, the excess of jobs over labour force would be reduced in Toronto, North York and Etobicoke but increased in the other three municipalities where the population growth is expected to exceed employment.

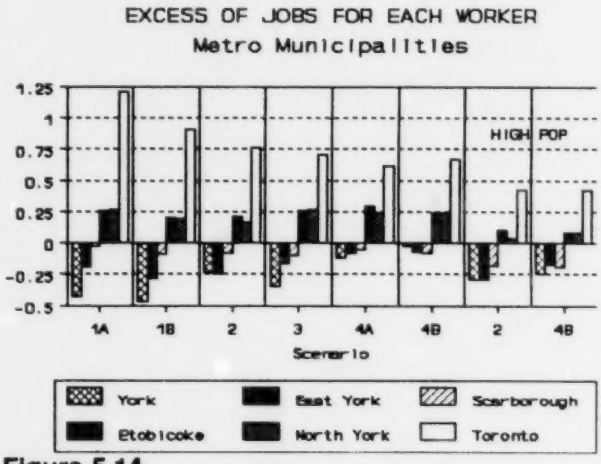


Figure 5.14

The requirement for long distance transportation facility improvements may be minimized if the Grid Scenario is pursued since it provides the greatest opportunity of any scenario to locate employment and residential development in close proximity. The requirement for transportation improvements may be further reduced if Metro's population were to grow to 3.2 million because of the greater reduction in the imbalance between employment and labour force in Toronto.

5.6 Employment Growth and Change by Sector

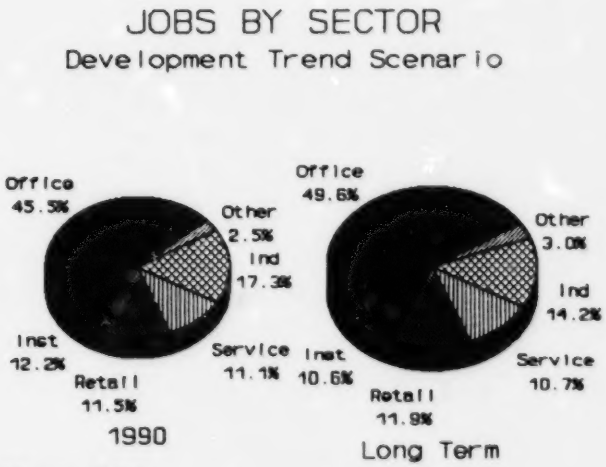


Figure 5.15

The relative shift in employment from industrial (manufacturing and wholesale) activities to offices which Metro has experienced in the last decade is expected to continue. In the long term the office sector could constitute one half of Metro's employment, as shown in Figure 5.15, while industrial employment would decline from 17% to 14% of employment under the Development Trend Scenario. The relative growth of office employment is expected to be greater if Metro's employment exceeds 1.8 million. The shares of employment in the other sectors are expected to stay relatively stable with institutions, retail and services each accounting for 11 to 12 percent.

In the long term the growth of the office sector from 45% to 50% of Metro's employment under the Development Trend Scenario means that office employment would grow from 615,000 in 1990 to almost 880,000. Considerable growth also is expected in the retail and service sectors. The industrial sector is expected to have the lowest level of job increase of any sector.

The office sector will likely be the engine of employment growth in Metro. This sector should be the prime target for the attraction and development of new businesses in Metro although other programs which assist businesses currently located in Metro should be continued. Manufacturing and wholesale activities have limited growth prospects within Metro and will likely continue to seek low density suburban locations.

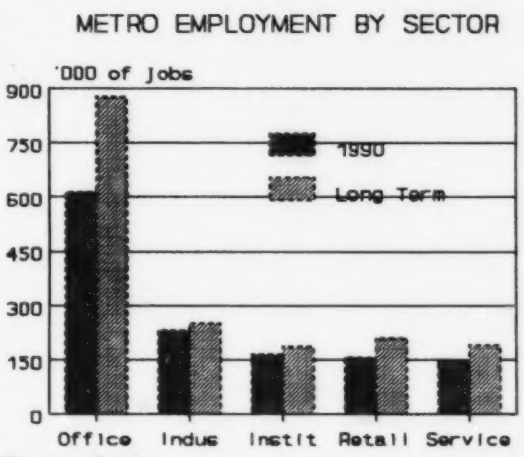


Figure 5.16

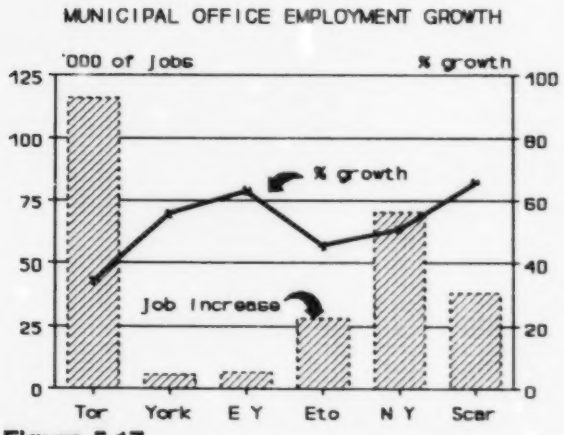


Figure 5.17

Toronto is anticipated to have both the largest increase in office employment and the largest number of office jobs (more than 450,000) under the Development Trend Scenario. All other municipalities are expected to have higher rates of office job growth, as shown in Figure 5.17. In Scarborough office employment is expected to grow by more than 65% resulting in almost 100,000 office jobs. In North York office job growth, at 51%, is expected to result in almost 210,000 office jobs in the long term. Etobicoke's office employment is expected to increase by almost 30,000 jobs resulting in 90,000 office jobs in the long term.

The Central Area of Toronto is expected to remain the preeminent office employment growth area of under the Development Trend Scenario as shown in Figure 5.18. Within the Central Area the principal areas of office employment growth are expected to be the railway lands and the Financial District. Beyond the Central Area, the Scarborough and North York City Centres are expected to be the foci of office employment growth. Other significant areas of office employment growth include York University, Downsview, Leaside, York City Centre, Eglinton and Yonge, Islington/Kipling/Bloor and the Queensway.

Figures 5.19 and 5.20 show that retail and service employment growth under the Development Trend Scenario is expected to be more dispersed than office job growth. The Central Area is still a noticeable nucleus of growth in those sectors.

EMPLOYMENT GROWTH
Development Trend, Scenario #1A

Figure 5.18

OFFICE

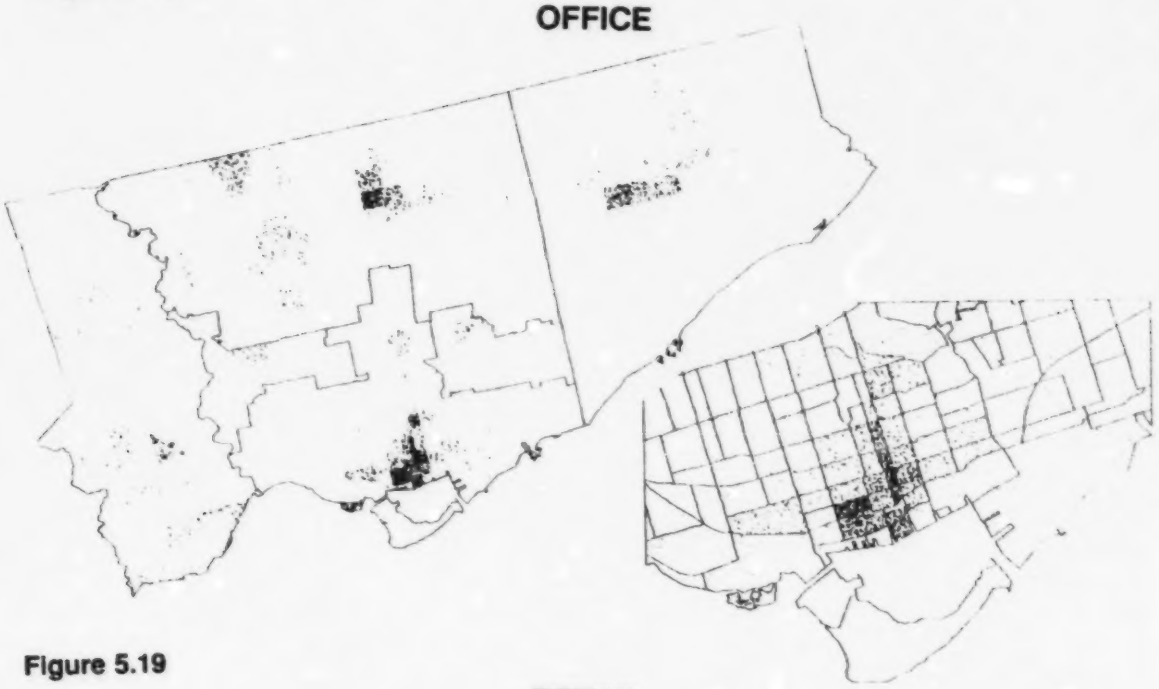


Figure 5.19

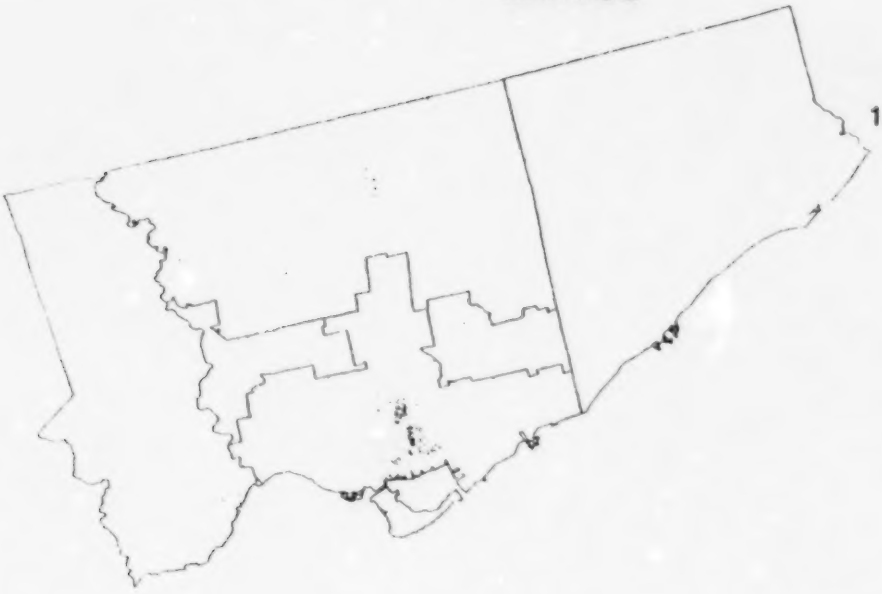
RETAIL

1 dot = 25 jobs

EMPLOYMENT GROWTH
Development Trend, Scenario #1A

Figure 5.20

SERVICE



1 dot = 25 jobs

6. CONCLUSIONS AND FUTURE DIRECTIONS

This report has examined the future demographic characteristics of Metro and the GTA from two perspectives - realization of current development applications and trends and the implementation of significant policy initiatives within Metro. This chapter identifies major conclusions which arise when the targets and policy initiatives are achieved. It also indicates the ways in which the scenarios are being used to narrow the range of policy options and briefly discusses some of the issues which Metro must confront if it is to achieve growth and change.

6.1 Major Conclusions

6.1.1 Metro could accommodate the Demographic Projection

The demographic forecast presented in the report **Projections and their Policy Implications** recommended a Metro population of 2.5 million by the year 2011 although no estimate was made of the capability of Metro to accommodate such a population. If current development applications, Scenario #1A in this report, were implemented and the number of persons per household changes as expected, Metro could accommodate almost 2.5 million people by 2011. If additional development proposals, currently being discussed, were implemented, Scenario #1B, Metro could accommodate a population of almost 2.7 million.

6.1.2 Higher growth in Metro could reduce urban sprawl in the GTA

The population and employment scenarios clearly show that increases in development within Metro could reduce urban sprawl outside of Metro. However Metro will have to attract and retain a higher proportion of family households than it has in the recent past.

6.1.3 The resident labour force in Metro will decline in the short term

The number of workers living in Metro will decline into the mid nineties as a result of the changing age structure of the population. The number of people who work in Metro but live outside of Metro (net in-commuting) is expected to more than double from the 1986 level. This growing imbalance between resident labour force and employment in Metro could be alleviated if population levels in excess of the Development Trend were achieved.

6.1.4 Substantial amounts of new housing will be required in Metro

During the eighties, an average of 9,000 new housing units, which includes an allowance for demolitions, were produced in Metro. In order to meet a Metro population target of 2.5 million by the year 2011, the annual production of new housing, excluding any allowance for demolitions, would have to average eight thousand units while the population target of 2.8 million would require an average of almost eleven thousand new housing units. This would increase the current housing stock of 884,000 by 172,000 and 233,000 net new units respectively.

6.1.5 *The distribution of growth within Metro depends on the development policies pursued*

Area municipal population growth could vary considerably as shown below depending not only on Metro's level of population and employment growth, but also on the development policies.

Table 6.1

Range of Municipal Population and Employment Growth ('000) 1990 - 2011					
Municipality	Population			Employment	
	Trend #1A	Metro 2.7 million	Metro 3 million	Trend #1A	Metro 1.8 million
Toronto	84	164-238	343-386	154	160-210
York	27	24- 39	41- 49	10	10- 33
East York	10	10- 21	14- 22	7	6- 14
Etobicoke	59	61- 81	90-103	39	42- 64
North York	83	99-137	187-194	88	100-124
Scarborough	68	102-109	158-164	67	81- 92

6.1.6 *Metro's population will be proportionately older*

There will be fewer people under 15 ages of age in Metro. In contrast, the number of seniors is expected to grow. Although the working age population is expected to maintain its current share of Metro's population, it is expected to shift to an older age profile. All age groups are expected to increase in areas of Metro where a notable increase in the number of housing units is expected.

6.1.7 *The balance of employment and labour force in Metro depends on the development policies pursued*

The best balance of resident labour force to jobs by municipality is achieved by the Grid scenarios, #4a and #4b. These scenarios also show significant improvements in the balance of jobs and resident labour force in the Central Area by limiting commercial and office development and promoting residential development in the area.

6.1.8 *Metro could achieve the employment targets*

Past employment trends provide evidence that Metro could easily achieve 1.8 and possibly 1.9 million jobs in the long term. However, constraints on Metro's ability to achieve these employment levels could arise from competition in suburban office centres in the regions and continuing declines in the Ontario economy.

6.1.9 *Most future employment growth will be in the office sector*

Past employment trends also show that there has been a structural shift in employment in Metro, away from manufacturing and warehousing activities towards office activities. Although all sectors are expected to show some employment growth in the future, the office sector is expected to surpass all of the other sectors combined, and could add almost 250,000 jobs in the long term. This would result in almost fifty percent of employment in Metro being in offices. Toronto is expected to account for almost one half of office employment growth, while the other municipalities, particularly North York and Scarborough, are expected to have high rates of office employment growth.

6.1.10 *Achievement of growth targets is dependent on aggressive implementation of intensification policies*

These scenarios anticipate significant population growth, ranging from 300,000 to one million people, over the next twenty to thirty years. Based on past population growth trends, Metro would be unlikely to achieve the population levels suggested in these scenarios. Metro's population has remained relatively stable during the last decade and a half although at the same time Metro has added a substantial number of new housing units, albeit at a declining rate. This growth in the housing stock has been offset by a continuing decline in the number of persons per household (PPH). If the decline in the PPH in Metro is less than previously experienced and Metro could maintain its recent level of housing production, then Metro might accommodate a population of 2.5 million.

The supply of new housing and the attractiveness of the GTA as a destination for migrants are additional factors which will affect the ability of Metro to achieve the population levels of these scenarios. The ability of Metro and the area municipalities to implement accelerated housing intensification programs and the production of types of housing which satisfy the needs of families will determine whether Metro can achieve population levels in excess of 2.5 million. If housing intensification programs are accepted and if such programs result in significant increases in Metro's housing stock, then Metro could achieve the higher population levels particularly if the housing is successfully marketed for families. Furthermore, if the GTA continues to have a robust economy and is perceived as an attractive destination for migrants, then achievement of higher population levels is possible.

6.2 *Further Study will reduce or combine scenarios*

The following studies and policy developments could reduce the number of land use scenarios through the selection of policies which best achieve development objectives and through the construction of infrastructure which may reduce policy options.

6.2.1 *The New Metropolitan Official Plan*

Metro Council is developing a new official plan for the municipality which will provide guidance to future development. The scenarios are intended to assist in defining the

development pattern and policies which will be the basis for the plan. As the plan develops, the range of scenarios should narrow.

6.2.2 Long Range Rapid Transit Network Study

The scenarios are being used in a Metropolitan long range rapid transit study to evaluate future rapid transit facilities and the impact of those facilities on the distribution of population and employment. It is possible that the study will also test additional land use scenarios which blend characteristics of some of the alternatives in this study. The selection and eventual construction of rapid transit facilities will have an impact on the distribution of population and employment which will require a re-evaluation of the range of possible future scenarios.

6.2.3 Infrastructure

The commitment to construct infrastructure such as new or expanded highways, airports and rail/rapid transit could have implications for future development within the GTA. This could limit the scenarios being considered or it could result in the adjustment of the scenarios under consideration. The Planning Department will monitor the implications of those decisions on the scenarios.

6.3 The Need to Monitor

There are uncertainties regarding the scenarios and their achievement. Despite these uncertainties, it is essential to establish the range of possible futures in order to decide the direction which the community wishes to take and then ensure that subsequent actions are consistent with the achievement of that direction. This report contains a range of possible futures which might occur, given our limited knowledge of the future. Since factors affecting growth are likely to change, this Department will monitor those factors, re-evaluate the scenarios and report to Council on the implications of those changes.

APPENDICES

A.1 Development Trend Scenario Methodology

The **Development Trend Scenario,** which is based on the methodology described below, represents a future based on the construction of most committed and proposed developments, supplemented by the continuation of some past trends. Detailed data on the age and sex of the population, housing units by structure type, labour force and employed labour force by age and sex and employment by activity were generated only for this Scenario.

A.1.1 Methodology - Population

The following is a general explanation of the calculation of population and resident labour force for the Development Trend Scenario. These calculations are done for each traffic zone[17] in Metro. The calculation of the total population starts with the base year (1986) housing stock[18], less estimates of any housing units which may be demolished during the time period. The population living in that stock is estimated by using person per household (PPH) factors. New housing by structure type to be constructed during each time period is determined through a review of development applications and trends. The population living in new housing is calculated by multiplying the estimated new housing by PPH factors specific to new housing for each structure type and each time period. This process is illustrated in Figure A.1.

The population by age is estimated by taking the base year age proportions, adjusting them using changes in Metro's population calculated from the recommended scenario of the demographic model[19] and multiplying the age proportions by the total population calculated from the housing stock.

The resident labour force is computed by multiplying the population by age by employed labour force participation rates. More detail on specific components of the calculations is provided in the following sections. Estimates for **four time periods**; 1991, 2001, 2011 and the long term are developed. No estimates are made for intervening years.

A.1.1.1 Base Year Data

For each Metro traffic zone, an array of base demographic data was established using

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[17] The traffic zones are small areas of varying geographic size and population bounded by distinct geographic features such as roads, rail lines, rivers and hydro transmission corridors. There are 460 traffic zones within Metro.

[18] Wherever possible, base year data was supplemented by more recent information, including 1989 assessed population and housing, employment from the Metro employment survey and 1990 aerial photographs.

[19] This is a regional cohort survival population forecasting model, the results of which were published in **Projections and their Policy Implications**, April 1989.

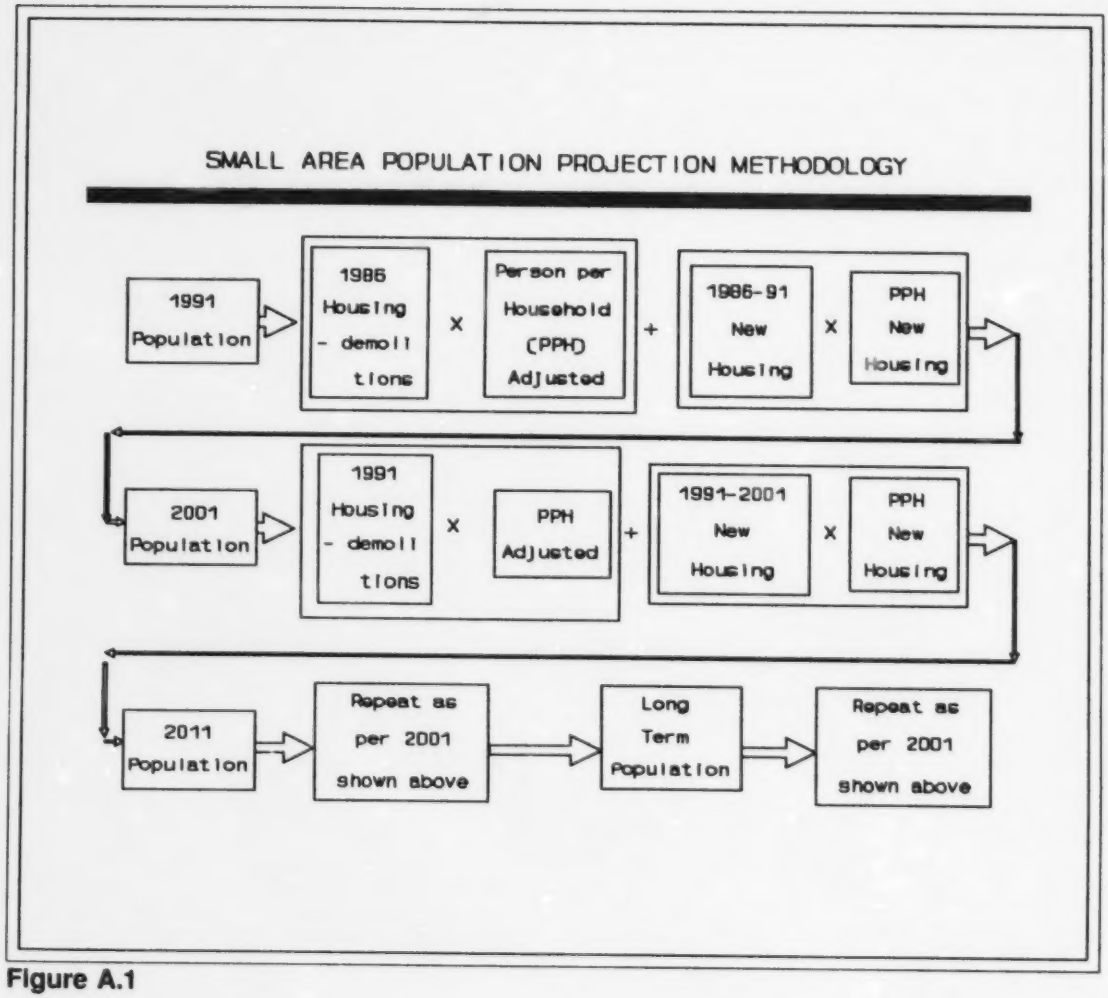

Figure A.1

information from the Census of Canada and the Ontario Ministry of Revenue Assessment Branch. This included population and housing by structure type, population by sex and age.

Population data such as the number of people, age and sex and housing data including number of units by structure type, were obtained from all residents by the national census conducted by Statistics Canada in June 1986 . Other data such as labour force participation, were collected from a twenty per cent sample of residents which was factored by Statistics Canada to represent the total population. Metro Planning, through a special request, obtained population by age and sex and labour force participation rates, by age and sex for each traffic zone for the Greater Toronto Area (GTA). The Census provides the only complete small area data set for the GTA.

Since the starting point for the model was the end of 1986, adjustments were made to the

June 1986 census data using the Ontario Ministry of Revenue, Assessment Branch data. In addition housing and population data from the Assessment Branch for subsequent years, up to and including 1989, was used to check and adjust forecast trends.

The base data used does have limitations. Adjustments to the data for changes which have occurred in each traffic zone from 1986 to 1989 or 1990 could be done only for Metro. Some undercount of the Census was experienced, in part, because of the incomplete enumeration of students and homeless persons[20]. At the time of the request for census data by traffic zone, portions of the Regions[21] of the GTA had not been geo-coded. Within Metro, the original Census request was for 400 traffic zones, some of which were later subdivided when the number of zones were increased to 460 in Metro. Approximations were made for those zones which had not been geo-coded or which were subsequently subdivided.

A.1.1.2 Persons Per Household Calculations

Recent trends in the number of persons per household (PPH) by structure type,[22] shown in Appendix two, were examined. The decline in the PPH has continued to occur in all municipalities and structure types except apartments. It is assumed that the PPH would continue to decline in the housing stock existing at the start of each time period with the rate of decline being both lower relative to the past and different for each structure type. It is estimated that, due to the age of the housing stock, the rate of decline would be slightly higher in Scarborough, North York and Etobicoke when compared to the other municipalities. In addition, new housing constructed during each time period is assumed to have a higher PPH than existing housing.

In the Regions, due to limited information about future housing types, only the PPH for the total housing stock in each traffic zone is used.

A.1.1.3 Estimating Future Housing

Estimates of the number of housing units which might be created in Metro through the development process were obtained from application information supplied by municipal planning departments and the development control division of the Metro Planning Department. This estimate includes all units not yet built but registered, approved or proposed in:

- plans of subdivision,
- plans of condominium,
- zoning by-law amendments,

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[20] see **Projections and their Policy Implications**, April 1989.

[21] The "Regions" are the regional municipalities of Durham, York, Peel and Halton.

[22] Structure types utilized for the Metropolitan Toronto portion of the model were single detached, single attached (which includes semi-detached and row rentals), row condominium, apartment condominium, plexes, apartment rental and collectives.

- official plan amendments,
- secondary plans studies and
- other available planning studies.

The timing of the construction of each development is based on its stage in the planning approval process.

The creation of new housing units through the conversion or division of existing structures is estimated based on trends experienced during the eighties within each traffic zone. Generally this adds to the "plexes" housing structure type.

In the Regions, development application information was obtained from area municipal planning departments only if it was not available from regional planning departments. In lieu of development applications or if such applications did not provide for long term development, recent regional or area municipal traffic zone projections are utilized. In the absence of both development applications or traffic zone projections for the regions, forecasts from official plans or development trends identified by consultants for the office of the Greater Toronto Area[23] are used.

Within Metro, **demolitions** and **conversions** have had an impact on the total housing stock. Future trends in demolitions in each traffic zone are estimated from recent changes in housing in each zone. Although there is a lack of demolition information for the Regions, it is estimated that such demolitions would be insignificant and would not affect the housing stock in the Regions during the study period.

A.1.1.4 Population by Age Calculation

The total population of each zone is calculated by multiplying the estimated future housing stock by the PPH factors. Then the total population is incorporated in a component of the model which calculates **the age distribution[24] by sex**. The 1986 proportion of the population by sex in each age group in each zone, adjusted by the change in each age group which had been forecast for Metro Toronto by the regional demographic model, is the basis for the age calculation.

Population by age and sex are calculated only for Metro and not for the Regions.

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[23] Office of the Greater Toronto Area Co-ordinating Committee, Ontario Ministry of the Environment, consultant studies prepared by Clayton Research Associates Limited, Hemson Consultants and IBI.

[24] The age groupings used in the model are 0-14, 15-24, 25-44, 45-54, 55-59, 60-64 and 65+.

A.1.1.5 Employed Labour Force Calculation

The estimated population, by age and sex, in each zone is used to calculate forecasts of the resident, employed labour force. Estimated labour force participation rates, based on the adjusted 1986 proportions of the population by age and sex which were in the labour force, are applied to the forecast population. 1986 employment rates are then applied to the estimated labour force.

After examining past trends, it was estimated that the male labour force participation rates would remain constant at the 1986 rate during the study period except for slight decreases in the 60 plus age groups. It was estimated that female participation rates would increase slightly from the 1986 rates in each age group and in each time period.

The proportion of the labour force which is employed has varied considerably over the last decade. Since these scenarios are not intended to predict economic cycles, it was estimated that the proportion of the labour force by age and sex which will be employed will be the same as in 1986.

A.1.2 Methodology - Employment

In general, employment is calculated in each zone by adding an estimate of employment generated from development applications to an adjusted employment base for the zone. The development application employment is calculated by multiplying the floor space of the application by an employee density factor. The 1986 data base is adjusted for recent trends identified in employment surveys, possible demolitions and conversion of employment areas to non-employment activities or to alternative employment activities (i.e., industrial to office uses).

A.1.2.1 Base Data

1986 employed labour force by place of work data from the Census was obtained for each zone in the GTA . In Metro the Census data is supplemented by data from the Planning Department employment survey for 1989 and 1990[25]. This survey classifies employment according to the principal activity at the place of work[26]. In the traffic zone model, employment is grouped as follows: office, manufacturing/warehousing; service, retail, institutions and other.

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[25] see Metropolitan Toronto Planning Department, **Metro Facts... Metro Toronto's Employment Picture 1983-1990**, March 1991.

[26] This is different from the Standard Industrial Classification (SIC) Code which classifies business according to the principal product or service of the firm.

A.1.2.2 Future Employment Calculations

The base data is adjusted for the continuation of past trends and expected demolitions or conversions of areas to non-employment uses. The past trends include changes in both the average number of employees per work place and the number of work places by activities, as well as the conversion of work place activities, e.g., industrial space to office space. Some municipalities were able to identify expected demolitions and conversions.

Future employment is determined by adding an estimate of new employment, which is calculated by multiplying the floor space of employment related development applications by employee/floor space factors, to the base data. These factors, which are derived from Planning Department data bases are:

Activity	Metres of gross floor space per employee
office	28
industrial	45
retail	33
service	32

In some instances adjustments are made to the future employment if the proposal was significantly different from these factors. For example, if a warehouse proposal is expected to have little employment, the future employment is adjusted to reflect the specific use.

In the Regions, forecasts of employment are estimated based on the number of employees per acre for industrial and commercial areas. Population serving employment is added in zones experiencing population growth. Wherever possible these estimates are supplemented by regional or area municipal employment forecasts either in planning documents or background reports.

APPENDIX TWO PERSONS PER HOUSEHOLD BY STRUCTURE TYPE

MUNICIPALITY	YEAR	STRUCTURE TYPE						
		Single	Single Attached	Plexes	Apartment	Collective	Other	Total
TORONTO	1985	2.957	3.030	2.702	1.608	6.866	2.041	2.340
	*1986	3.056			1.748			2.351
	1988	2.848	2.837	2.632	1.619	4.608	2.046	2.256
	1989	2.834	2.798	2.627	1.619	4.772	2.057	2.242
	1990	2.818	2.785	2.345	1.614	4.999	2.061	2.239
EAST YORK	1985	2.618	2.896	2.284	1.851	42.450	2.194	2.264
	*1986	2.688			1.913			2.317
	1988	2.555	2.766	2.208	1.851	27.172	2.234	2.216
	1989	2.551	2.733	2.229	1.848	26.300	2.260	2.212
	1990	2.551	2.720	2.259	1.851	24.061	2.231	2.218
YORK	1985	2.955	3.299	2.672	1.840	17.449	2.659	2.496
	*1986	3.055			1.948			2.526
	1988	2.863	3.147	2.685	1.853	16.413	2.677	2.449
	1989	2.845	3.120	2.674	1.854	15.317	2.685	2.439
	1990	2.844	3.109	2.688	1.859	15.232	2.685	2.440
SCARBOROUGH	1985	3.248	3.441	2.862	2.193	50.585	2.178	2.909
	*1986	3.360			2.223			2.987
	1988	3.172	3.315	2.795	2.207	8.511	2.107	2.847
	1989	3.157	3.262	2.843	2.203	8.549	2.152	2.829
	1990	3.146	3.251	2.861	2.189	8.752	2.170	2.820
NORTH YORK	1985	3.199	3.747	2.588	2.272	8.650	2.361	2.803
	*1986	3.206			2.239			2.800
	1988	3.112	3.434	2.602	2.216	7.693	2.007	2.739
	1989	3.131	3.417	2.666	2.200	7.868	2.436	2.738
	1990	3.146	3.416	2.710	2.197	8.602	2.395	2.743
ETOBICOKE	1985	3.066	3.375	2.265	2.101	25.123	2.381	2.689
	*1986	3.091			2.140			2.714
	1988	2.973	3.234	2.253	2.083	27.377	2.341	2.622
	1989	2.970	3.200	2.274	2.071	25.463	2.341	2.605
	1990	2.966	3.184	2.321	2.044	28.233	2.359	2.605
METRO TORONTO	1985	3.101	3.330	2.669	1.989	8.958	2.132	2.615
	*1986	3.161			2.010			2.643
	1988	3.015	3.156	2.614	1.964	6.295	2.143	2.547
	1989	3.011	3.121	2.621	1.958	6.510	2.151	2.536
	1990	3.009	3.112	2.636	1.955	6.849	2.154	2.535

Notes: single attached - includes row condo

* - Census of Canada, others, Ontario Ministry of Revenue, Assessment Branch

File : APPEN2.WK1

APPENDIX THREE GREATER TORONTO AREA POPULATION ('000) BY LAND USE SCENARIO

REGION	YEAR					% Growth	Share of Total		
	1986	1991	2001	2011	Long Term	1991- Long Term	1986	2011	Long Term
SENARIOS WITH METRO AT 2.5 MILLION POPULATION (Scenario #1A shown)									
METRO	2,175.9	2,261.9	2,373.0	2,459.4	2,520.3	10.3%	58.5%	43.6%	42.0%
DURHAM	325.7	405.8	565.2	689.2	758.0	46.5%	8.8%	12.2%	12.6%
YORK	352.5	512.0	719.4	880.8	970.0	47.2%	9.5%	15.6%	16.2%
PEEL	592.6	716.0	933.3	1,102.4	1,197.0	40.2%	15.9%	19.5%	20.0%
HALTON	269.8	330.6	434.2	514.8	555.0	40.4%	7.3%	9.1%	9.3%
4 Regions	1,540.6	1,964.4	2,652.2	3,187.1	3,480.0	43.6%	41.5%	56.4%	58.0%
GTA	3,716.5	4,226.3	5,025.2	5,646.5	6,000.0	29.6%	100.0%	100.0%	100.0%
SCENARIOS WITH METRO AT 2.8 MILLION POPULATION (Scenario #1B shown)									
METRO	2,175.9	2,261.9	2,502.3	2,689.2	2,796.0	19.1%	58.5%	47.7%	46.6%
DURHAM	325.7	405.8	529.6	626.0	681.0	40.4%	8.8%	11.1%	11.4%
YORK	352.5	512.0	643.4	745.6	804.0	36.3%	9.5%	13.2%	13.4%
PEEL	592.6	716.0	929.3	1,095.2	1,190.0	39.8%	15.9%	19.4%	19.8%
HALTON	269.8	330.6	418.1	486.1	525.0	37.0%	7.3%	8.6%	8.8%
4 Regions	1,540.6	1,964.4	2,520.4	2,952.9	3,200.0	38.6%	41.5%	52.3%	53.4%
GTA	3,716.5	4,226.3	5,022.7	5,642.1	5,996.0	29.5%	100.0%	100.0%	100.0%
SCENARIOS WITH METRO AT 3.2 MILLION POPULATION (Scenario #4B shown)									
METRO	2,175.9	2,261.9	2,684.1	3,012.4	3,200.0	29.3%	58.5%	53.4%	53.3%
DURHAM	325.7	405.8	507.1	585.9	631.0	35.7%	8.8%	10.4%	10.5%
YORK	352.5	512.0	588.7	648.4	682.6	25.0%	9.5%	11.5%	11.4%
PEEL	592.6	716.0	849.4	953.2	1,012.5	29.3%	15.9%	16.9%	16.9%
HALTON	269.8	330.6	395.1	445.3	473.9	30.2%	7.3%	7.9%	7.9%
4 Regions	1,540.6	1,964.4	2,340.4	2,632.8	2,799.9	29.8%	41.5%	46.6%	46.7%
GTA	3,716.5	4,226.3	5,024.4	5,645.2	6,000.0	29.6%	100.0%	100.0%	100.0%

File : APPEN3.WK1

APPENDIX FOUR GREATER TORONTO AREA EMPLOYMENT ('000) BY LAND USE SCENARIO

REGION	EMPLOYED LABOUR FORCE					EMPLOYMENT					EMPLOYMENT TO POPULATION RATIOS				
	1986	1991	2001	2011	Long Term	1986	1991	2001	2011	Long Term	1986	1991	2001	2011	Long Term
SCENARIOS WITH METRO AT 2.5 MILLION POPULATION (Scenario #1A shown)															
METRO	1,198	1,167	1,218	1,251	1,266	1,360	1,459	1,605	1,715	1,773	0.62	0.64	0.67	0.69	0.70
net commuting						160	292	387	464	507					
DURHAM	167	223	314	380	415	137	149	216	266	293	0.42	0.37	0.38	0.39	0.39
YORK	188	293	415	504	551	171	250	359	441	484	0.48	0.49	0.50	0.50	0.50
PEEL	330	427	560	654	705	303	390	495	574	616	0.51	0.54	0.53	0.52	0.51
HALTON	147	192	253	296	319	119	130	176	215	234	0.44	0.39	0.41	0.42	0.42
4 Regions	831	1,135	1,542	1,835	1,990	730	920	1,248	1,496	1,627					
GTA	2,031	2,302	2,760	3,086	3,256	2,089	2,379	2,853	3,211	3,400	0.56	0.56	0.57	0.57	0.57
net commuting						58	77	93	125	144					
SCENARIOS WITH METRO AT 2.8 MILLION POPULATION (#1B shown below)															
METRO	1,199	1,167	1,333	1,434	1,485	1,360	1,459	1,664	1,818	1,900	0.62	0.64	0.66	0.68	0.68
net commuting						160	292	331	384	415					
DURHAM	167	223	286	335	361	137	149	205	248	270	0.42	0.37	0.39	0.40	0.40
YORK	188	293	361	414	443	171	250	342	411	448	0.48	0.49	0.53	0.55	0.56
PEEL	330	427	543	631	680	303	390	475	539	573	0.51	0.54	0.51	0.49	0.48
HALTON	147	192	238	273	293	119	130	167	194	209	0.44	0.39	0.40	0.40	0.40
4 Regions	831	1,135	1,428	1,653	1,777	730	920	1,188	1,392	1,500					
GTA	2,031	2,302	2,760	3,087	3,261	2,089	2,379	2,853	3,210	3,400	0.56	0.56	0.57	0.57	0.57
net commuting						58	77	93	124	138					
SCENARIOS WITH METRO AT 3.2 MILLION POPULATION (#4B shown below)															
METRO	1,199.4	1,166.6	1,438.8	1,620.7	1,718.1	1,359.6	1,458.9	1,663.8	1,818.2	1,900.0	0.62	0.64	0.62	0.60	0.59
net commuting						160.2	292.4	225.0	197.5	181.9					
DURHAM	166.7	223.3	272.8	311.7	332.3	137.0	149.3	205.4	247.6	270.0	0.42	0.37	0.40	0.42	0.43
YORK	187.6	292.6	328.5	357.4	372.4	170.6	250.2	341.9	410.9	447.5	0.48	0.49	0.58	0.63	0.66
PEEL	330.1	427.1	494.3	547.8	575.8	302.9	390.1	475.3	539.4	573.4	0.51	0.54	0.56	0.57	0.57
HALTON	146.9	192.2	224.2	249.6	263.0	119.0	130.3	166.8	194.3	208.9	0.44	0.39	0.42	0.44	0.44
4 Regions	831.2	1,135.1	1,319.9	1,466.5	1,543.5	729.6	920.0	1,189.3	1,392.3	1,499.8					
GTA	2,030.7	2,301.8	2,758.7	3,087.2	3,261.6	2,089.2	2,378.9	2,853.1	3,210.5	3,399.8	0.56	0.56	0.57	0.57	0.57
net commuting						58.5	77.2	94.4	123.2	138.3					

File : APPEN4.WK1

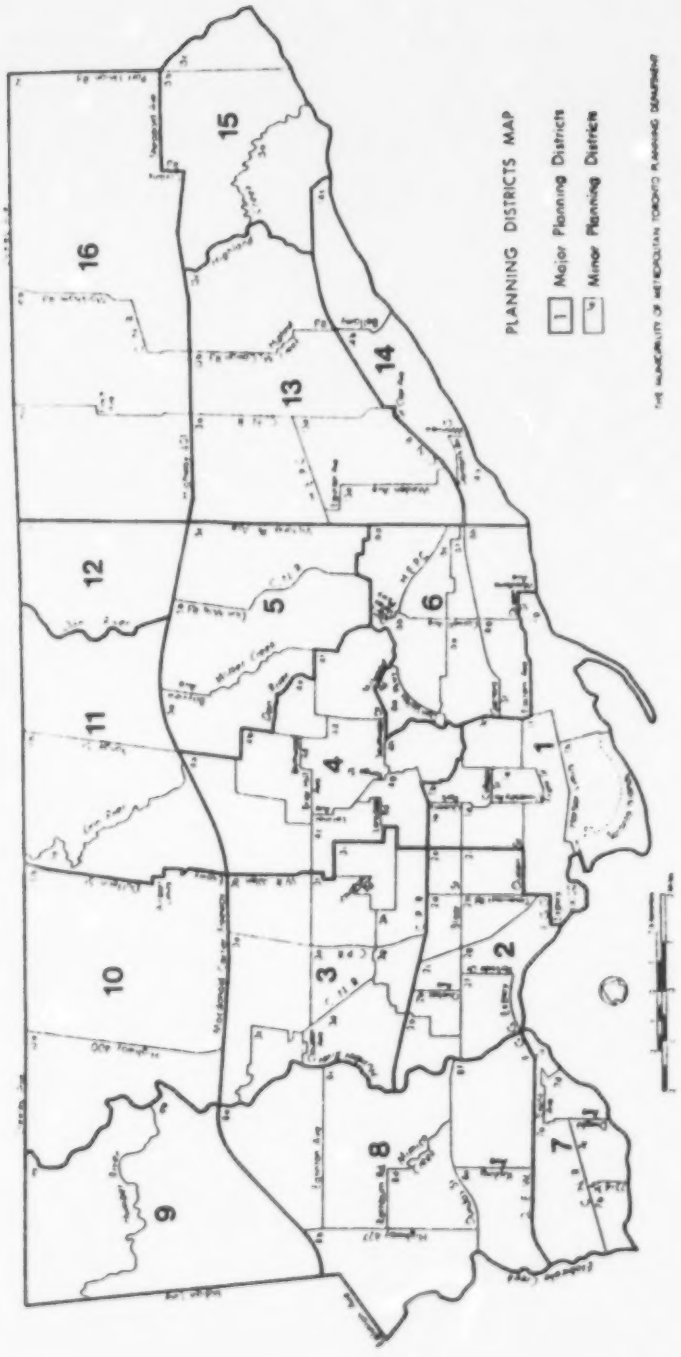
APPENDIX 5A POPULATION BY LAND USE SCENARIO

TOTAL POPULATION ('000)

	ACTUAL 1986*	1990**	1991	Area Municipal #1a Trend	#1b Trend Extended	-2011- Medium Population Increase- #2 Corridors & centres	#3 Nodal/Rail	#4 Grid Oppport	#4A Select Grid	-High Population Increase- #2 Corridors & centres	#4B Select Grid
Planning District											
1	133	132	155	201	257	271	294	303	303	391	355
2	199	193	198	196	208	220	199	214	214	232	238
3	224	220	229	250	275	264	264	253	254	277	288
4	184	182	186	195	202	230	212	211	205	255	230
5	106	106	110	113	119	116	130	115	120	121	134
6	205	186	204	202	216	218	203	218	217	226	238
7	51	49	55	79	91	56	78	61	61	57	69
8	175	170	178	183	189	216	211	217	211	241	233
9	76	76	83	93	97	85	90	92	88	87	96
10	146	144	147	180	198	150	169	163	160	154	179
11	131	132	139	163	180	197	185	187	204	234	226
12	77	75	76	75	77	94	78	82	82	108	90
13	183	175	186	200	228	212	223	225	222	231	246
14	58	55	61	63	65	62	63	69	70	63	81
15	65	67	70	78	81	71	81	73	75	73	82
16	163	173	183	197	207	229	212	210	207	262	226
METRO	2,176	2,137	2,262	2,469	2,689	2,692	2,692	2,692	2,692	3,013	3,012
Municipality											
Toronto	617	595	638	679	759	824	806	833	827	981	936
York	135	133	140	160	172	166	164	157	158	174	182
East York	101	95	102	105	116	105	105	108	108	109	117
Etobicoke	302	296	316	355	377	357	379	371	360	386	399
North York	551	548	566	631	685	666	658	647	667	735	742
Scarborough	469	471	501	539	580	574	579	577	573	629	635
METRO	2,176	2,137	2,262	2,469	2,689	2,692	2,692	2,692	2,692	3,013	3,012

Note : * = census; ** = assessment (incomplete enumeration)

File : APPEN5A.WK1


PLANNING DISTRICTS MAP
Major Planning Districts
Minor Planning Districts
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APPENDIX 5B

POPULATION BY LAND USE SCENARIO

TOTAL POPULATION ('000)

	ACTUAL		1991	LONG TERM - BEYOND 2011							
				Development		Medium Population Increase				High Population Increase	
	1986*	1990**		#1a Trend	#1b Trend Extended	#2 Corridors & centres	#3 Nodal/Rail	#4A Grid Oppport	#4B Select Grid	#2 Corridors & centres	#4B Select Grid
Planning District											
1	133	132	155	213	282	300	328	340	340	450	405
2	199	193	198	196	210	226	199	217	218	240	247
3	224	220	229	255	287	272	273	259	260	288	303
4	184	182	186	197	206	241	219	217	210	273	241
5	106	106	110	113	121	117	135	116	123	124	140
6	205	186	204	201	219	222	203	221	221	232	246
7	51	49	55	85	101	56	84	63	63	58	73
8	175	170	178	184	191	226	219	227	219	257	246
9	76	76	83	96	100	86	92	94	89	88	100
10	146	144	147	189	211	151	174	167	163	156	188
11	131	132	139	169	190	212	196	199	221	258	248
12	77	75	76	75	77	99	79	83	83	116	93
13	183	175	186	204	238	219	232	235	231	242	260
14	58	55	61	63	65	62	64	71	72	64	86
15	65	67	70	81	83	72	84	74	76	74	85
16	163	173	183	201	213	240	219	217	213	281	237
METRO	2,176	2,137	2,262	2,520	2,796	2,800	2,800	2,800	2,800	3,201	3,200
Municipality											
Toronto	617	595	638	690	789	870	848	882	875	1,067	1,013
York	135	133	140	165	181	172	170	162	163	183	193
East York	101	95	102	106	120	106	106	109	109	110	121
Etobicoke	302	296	316	365	392	368	395	385	370	403	419
North York	551	548	566	647	715	691	681	667	692	777	785
Scarborough	469	471	501	549	600	593	599	596	591	661	668
METRO	2,176	2,137	2,262	2,520	2,796	2,800	2,800	2,800	2,800	3,201	3,200

Note : * = census; ** = assessment (incomplete enumeration)

File : APPEN5B.WK1

APPENDIX 6A HOUSING BY LAND USE SCENARIO

TOTAL HOUSING UNITS ('000)

		ACTUAL 1986**	ACTUAL 1990**	2011 Development #1a Trend	2011 Development #1b Trend Extended	2011 Medium Population Increase #2 Corridors & centres	2011 Medium Population Increase #3 Nodal/Rail	2011 Medium Population Increase #4A Grid Oppport	2011 Medium Population Increase #4B Select Grid	2011 High Population Increase #2 Corridors & centres	2011 High Population Increase #4B Select Grid
Planning District											
	1	68.0	78.5	114	133	143	163	159	160	209	179
	2	81.2	82.8	86	90	95	84	91	92	94	98
	3	84.8	87.6	103	110	103	103	99	99	102	109
	4	90.8	93.1	102	103	118	109	108	104	125	113
	5	41.0	43.1	47	49	46	52	46	48	46	52
	6	83.9	85.0	87	93	93	85	93	93	91	98
	7	21.5	22.6	37	39	25	34	27	27	24	30
	8	68.1	69.0	76	77	87	84	88	85	92	90
	9	23.8	25.8	33	33	28	30	31	29	28	32
	10	47.5	48.0	68	70	51	59	55	54	49	59
	11	51.6	55.2	71	74	81	75	77	84	92	90
	12	26.4	26.8	28	28	35	28	29	29	38	31
	13	65.8	69.1	80	89	82	85	86	85	84	91
	14	21.9	22.9	25	26	24	25	27	27	23	31
	15	21.7	23.9	29	29	25	28	26	26	24	28
	16	53.7	61.7	72	73	81	73	74	72	87	77
METRO		851.5	895.0	1,056	1,116	1,117	1,117	1,117	1,117	1,209	1,209
Municipality											
	Toronto	275.4	289.9	332	360	394	393	398	394	464	432
	York	55.3	57.3	70	73	69	67	65	65	68	73
	East York	44.4	45.4	50	53	48	48	49	49	47	52
	Etobicoke	113.4	117.4	146	149	140	147	146	142	144	152
	North York	199.8	207.5	252	265	255	251	246	255	268	275
	Scarborough	163.1	177.6	216	216	211	211	213	211	219	226
METRO		851.5	895.0	1,056	1,116	1,117	1,117	1,117	1,117	1,209	1,209

Note : ** = assessment

File : APPEN6A.WK1

APPENDIX 6B

HOUSING BY LAND USE SCENARIO

TOTAL HOUSING UNITS ('000)	ACTUAL		Development		Long Term - Beyond 2011 Medium Population Increase				High Population Increase	
	1986**	1990**	#1a Trend	#1b Trend Extended	#2 Corridors & centres	#3 Nodal/Rail	#4A Grid Oppport	#4B Select Grid	#2 Corridors & centres	#4B Select Grid
Planning District										
1	68.0	78.5	120	151	164	176	185	185	248	210
2	81.2	82.8	90	94	100	88	96	96	99	105
3	84.8	87.6	108	118	110	111	105	105	109	118
4	90.8	93.1	107	108	128	119	110	110	137	122
5	41.0	43.1	49	52	48	54	51	51	48	56
6	83.9	85.0	92	98	97	89	97	97	95	104
7	21.5	22.6	39	44	25	38	29	29	25	32
8	68.1	69.0	80	81	94	88	91	91	101	98
9	23.8	25.8	35	36	29	32	31	31	29	34
10	47.5	48.0	71	78	53	65	57	57	51	64
11	51.6	55.2	74	81	90	84	94	94	103	102
12	26.4	26.8	29	29	37	29	31	31	41	33
13	65.8	69.1	84	96	87	93	92	92	90	100
14	21.9	22.9	27	27	25	26	29	29	24	33
15	21.7	23.9	30	30	26	30	27	27	25	29
16	53.7	61.7	75	78	87	79	77	77	96	82
METRO	851.5	895.0	1,112	1,200	1,201	1,200	1,203	1,203	1,321	1,321
Municipality										
Toronto	275.4	289.9	350	387	431	421	433	433	521	480
York	55.3	57.3	74	79	73	73	69	69	73	79
East York	44.4	45.4	52	57	50	51	52	52	49	55
Etobicoke	113.4	117.4	154	160	149	157	151	151	154	164
North York	199.8	207.5	265	286	274	270	274	274	290	299
Scarborough	163.1	177.6	217	232	225	228	225	225	236	245
METRO	851.5	895.0	1,112	1,200	1,201	1,200	1,203	1,203	1,321	1,321

Note : ** = assessment

APPENDIX 7A EMPLOYMENT BY LAND USE SCENARIO

TOTAL EMPLOYMENT ('000)	ACTUAL 1986*	ACTUAL 1990**	1991	2011 Area Municipal #1a Trend	#1b Trend Extended	2011 Medium Employment Increase #2 Corridors & centres	#3 Nodal/Rail	#4A Grid Oppport	#4B Select Grid
Planning District									
1	429.3	423.3	448	557	586	565	548	508	508
2	56.5	53.0	55	60	62	72	62	83	85
3	89.5	88.2	96	106	110	120	120	131	134
4	106.7	100.7	105	115	120	141	132	129	141
5	62.1	62.7	66	69	71	68	86	74	81
6	49.2	45.9	48	52	54	61	52	73	73
7	30.3	28.8	29	39	43	32	42	41	41
8	76.3	78.3	84	98	105	115	111	114	106
9	74.8	79.9	82	89	92	81	97	96	87
10	116.2	109.0	121	143	163	125	149	150	147
11	49.0	50.6	64	88	93	103	95	88	94
12	33.4	37.9	39	41	42	57	50	46	46
13	102.1	104.2	114	135	143	131	139	142	138
14	10.7	7.9	9	10	11	13	13	24	25
15	12.4	12.1	14	15	16	15	19	19	21
16	61.1	67.8	84	99	107	117	102	99	90
METRO	1,359.6	1,350.2	1,459	1,715	1,818	1,818	1,818	1,818	1,818
Municipality									
TORONTO	610.5	590.6	623	745	781	801	763	751	763
YORK	35.1	34.5	38	44	46	60	52	65	67
EAST YORK	32.4	30.0	32	37	39	36	40	44	44
ETOBICOKE	181.3	186.9	195	226	241	229	250	251	234
NORTH YORK	313.9	316.3	350	404	436	416	440	423	435
SCARBOROUGH	186.3	192.0	221	259	276	276	273	284	275
METRO	1,359.6	1,350.2	1,459	1,715	1,818	1,818	1,818	1,818	1,818

Note : * = census; ** = planning department survey

APPENDIX 7B

EMPLOYMENT BY LAND USE SCENARIO

TOTAL EMPLOYMENT ('000)	ACTUAL 1986*	ACTUAL 1990**	1991	#1a Development Trend	#1b Trend Extended	LONG TERM - BEYOND 2011 #2 Corridors & centres	#3 Nodal/Rail	#4a Grid Oppport	#4b Select Grid
Planning District									
1	429.3	423.3	448	581	617	592	571	522	522
2	56.5	53.0	55	61	64	76	63	90	91
3	89.5	88.2	96	108	113	126	126	139	142
4	106.7	100.7	105	118	124	149	138	135	149
5	62.1	62.7	66	69	72	69	91	76	84
6	49.2	45.9	48	53	55	63	53	78	79
7	30.3	28.8	29	41	47	33	45	44	44
8	76.3	78.3	84	102	110	123	118	121	111
9	74.8	79.9	82	90	94	81	100	99	88
10	116.2	109.0	121	148	172	126	156	156	153
11	49.0	50.6	64	93	100	112	102	94	101
12	33.4	37.9	39	41	43	61	52	47	48
13	102.1	104.2	114	140	150	135	145	149	144
14	10.7	7.9	9	10	11	13	13	27	29
15	12.4	12.1	14	15	16	15	21	20	23
16	61.1	67.8	84	102	112	125	106	102	92
METRO	1,359.6	1,350.2	1,459	1,773	1,900	1,900	1,900	1,900	1,900
Municipality									
Toronto	610.5	590.6	623	773	817	841	795	780	795
York	35.1	34.5	38	45	48	65	56	71	73
East York	32.4	30.0	32	38	40	37	42	47	47
Etobicoke	181.3	186.9	195	233	251	237	263	264	243
North York	313.9	316.3	350	417	455	431	460	440	455
Scarborough	186.3	192.0	221	267	289	289	285	298	287
METRO	1,359.6	1,350.2	1,459	1,773	1,900	1,900	1,900	1,900	1,900

Note : * = census; ** = planning department survey

APPENDIX EIGHT

JOBS TO RESIDENT LABOUR FORCE BY MAJOR PLANNING DISTRICT BY LAND USE SCENARIO

		1991	Long Term - Beyond 2011							
					Medium Population Increase				High Population Increase	
	ACTUAL 1986		#1a Development Trend	#1b Trend Extended	#2 Corridors & centres	#3 Nodal/Rail	#4a Grid Oppport	#4b Grid Select	#2 Corridors & centres	#4b Grid Select
Planning District										
1	5.57	5.30	5.09	3.77	3.31	2.98	2.63	2.63	2.23	2.18
2	0.53	0.56	0.65	0.61	0.67	0.64	0.82	0.84	0.63	0.73
3	0.78	0.87	0.90	0.80	0.94	0.93	1.09	1.11	0.88	0.94
4	1.01	1.05	1.16	1.11	1.12	1.14	1.13	1.30	0.98	1.11
5	0.56	0.64	0.74	0.67	0.63	0.92	0.70	0.78	0.60	0.69
6	0.44	0.47	0.57	0.51	0.58	0.53	0.72	0.73	0.55	0.64
7	1.08	1.01	0.96	0.87	1.10	1.00	1.31	1.31	1.07	1.10
8	0.78	0.90	1.08	1.07	1.01	1.02	1.00	0.96	0.89	0.84
9	1.77	1.91	1.89	1.80	1.81	2.09	2.00	1.90	1.75	1.66
10	1.93	2.07	2.47	2.54	1.94	2.10	2.43	2.25	1.83	1.95
11	0.62	0.85	0.97	0.87	1.40	1.09	1.07	1.17	1.35	1.01
12	0.47	0.56	0.48	0.42	0.55	0.50	0.45	0.41	0.45	0.36
13	2.29	2.76	3.45	3.42	2.41	3.25	3.16	3.06	2.05	2.68
14	0.11	0.10	0.10	0.09	0.12	0.11	0.22	0.24	0.11	0.21
15	0.40	0.45	0.49	0.49	0.49	0.64	0.57	0.63	0.47	0.52
16	1.76	2.38	2.45	2.45	3.21	2.36	2.57	2.25	3.11	1.98
METRO	1.13	1.25	1.40	1.28	1.27	1.28	1.28	1.28	1.11	1.11
Municipality										
Toronto	1.78	1.87	2.21	1.91	1.76	1.71	1.62	1.67	1.42	1.42
York	0.50	0.56	0.57	0.53	0.76	0.65	0.88	0.90	0.71	0.75
East York	0.59	0.62	0.81	0.72	0.75	0.84	0.92	0.93	0.71	0.83
Etobicoke	1.08	1.19	1.26	1.20	1.21	1.26	1.30	1.24	1.10	1.08
North York	1.05	1.21	1.27	1.19	1.17	1.27	1.24	1.24	1.04	1.08
Scarborough	0.71	0.85	0.97	0.91	0.92	0.90	0.95	0.92	0.82	0.81
METRO	1.13	1.25	1.40	1.28	1.27	1.28	1.28	1.28	1.11	1.11